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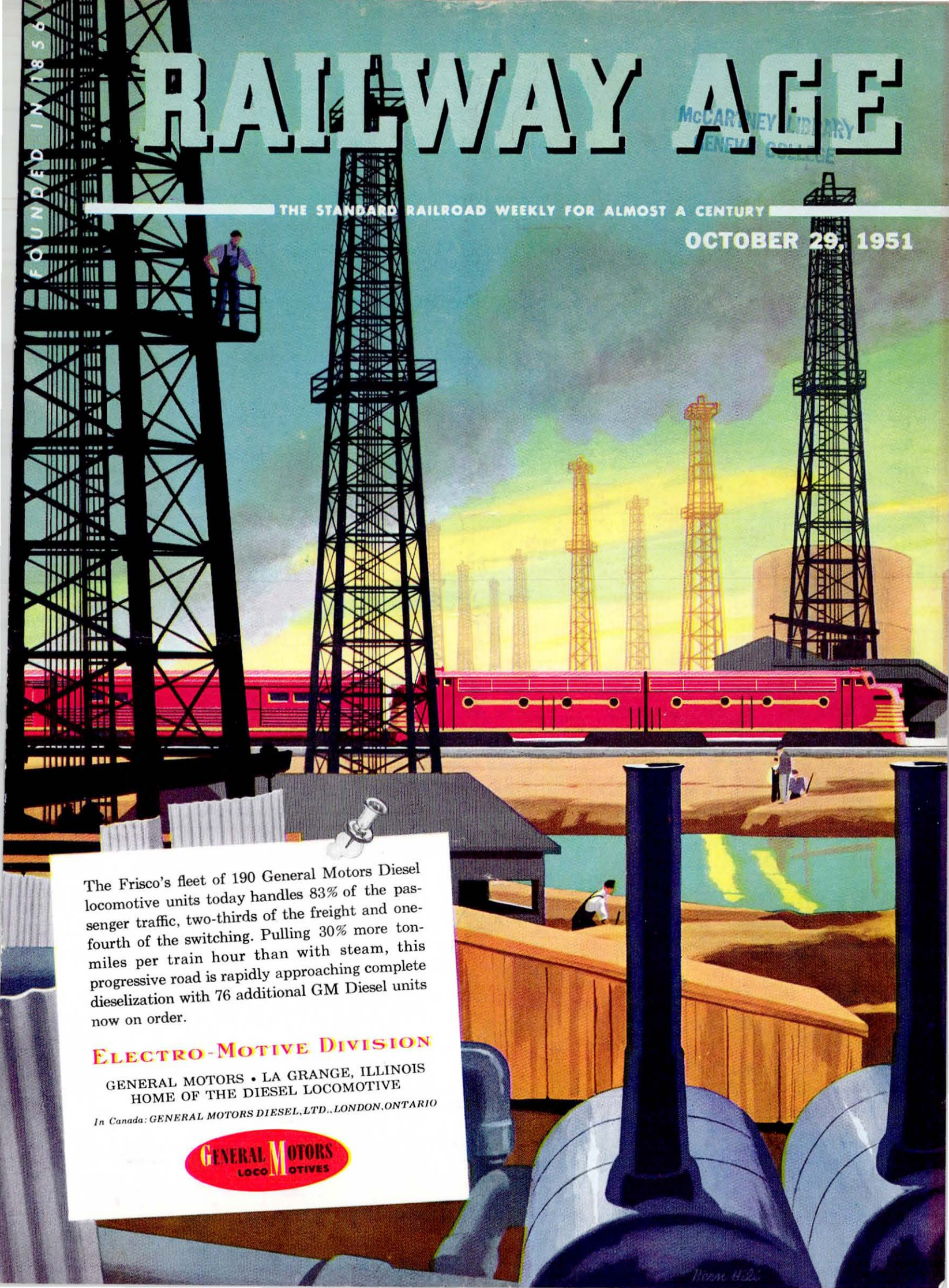
OCTOBER 29, 1951



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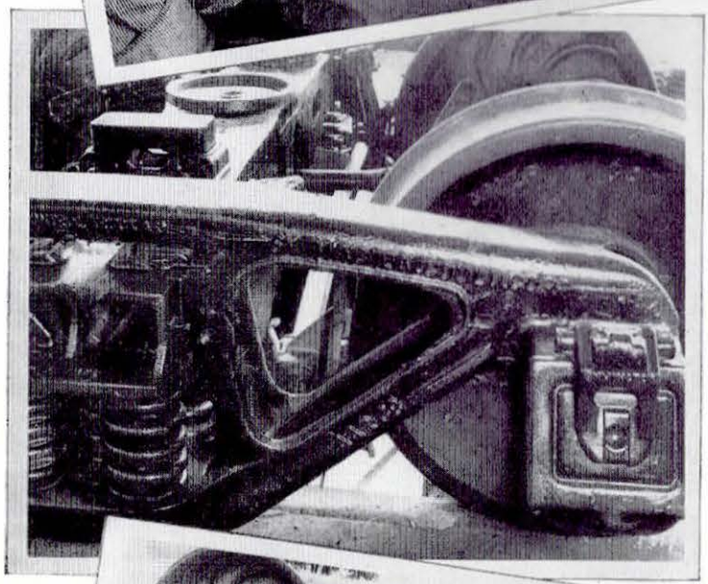

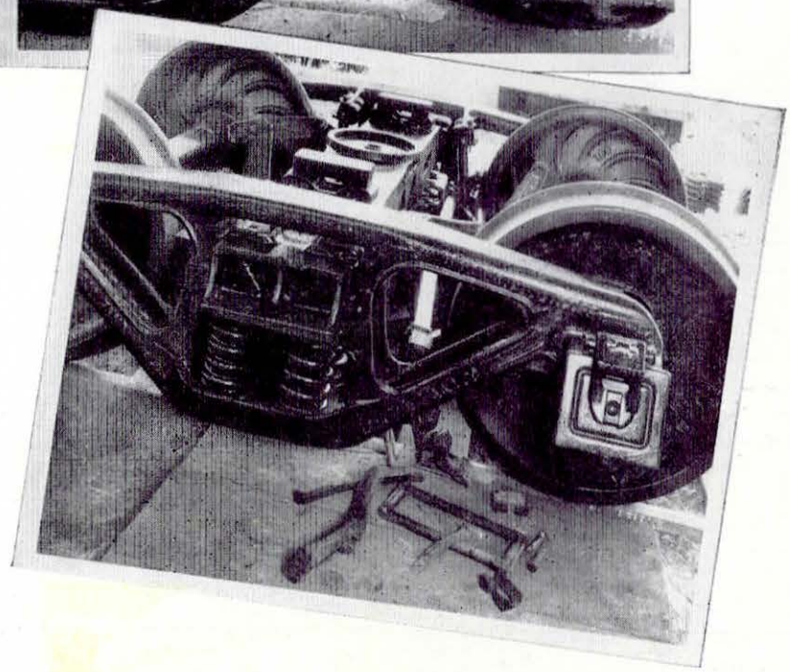

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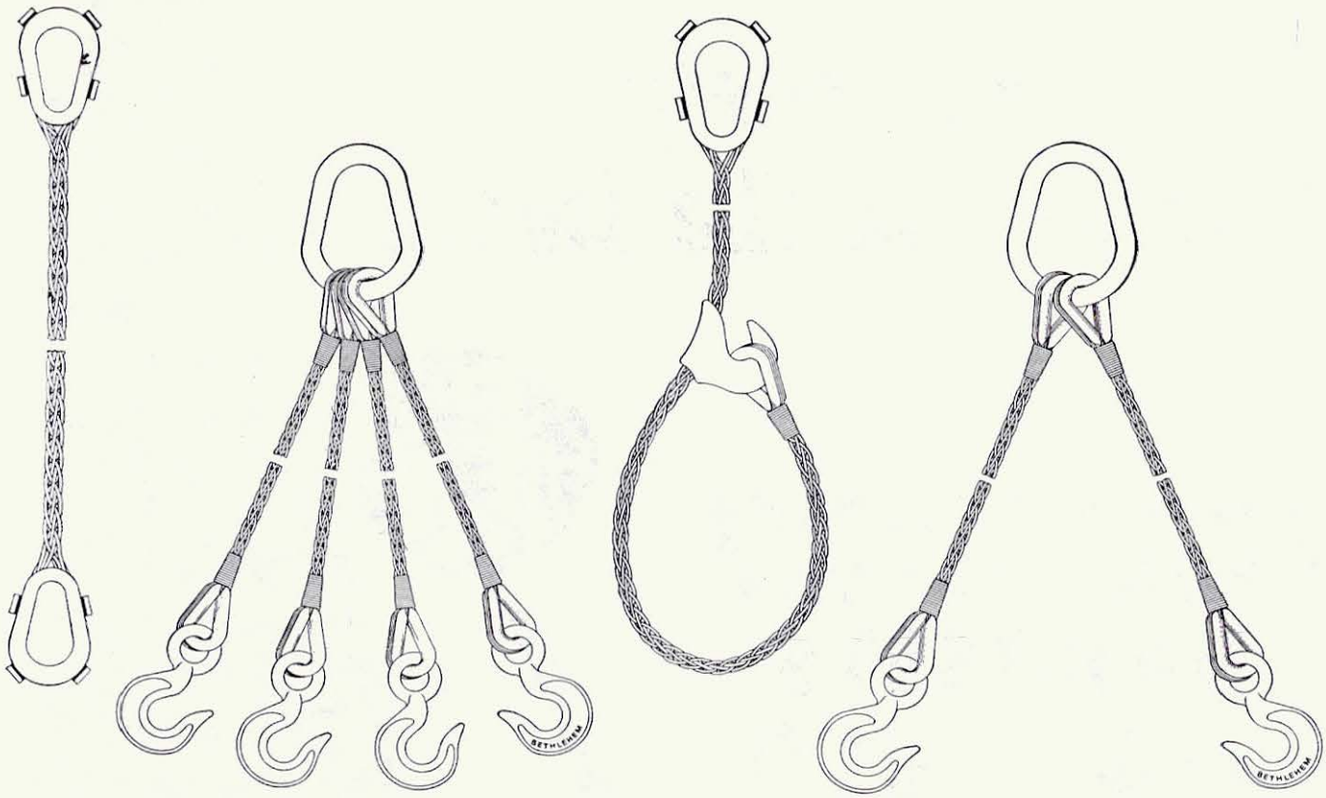

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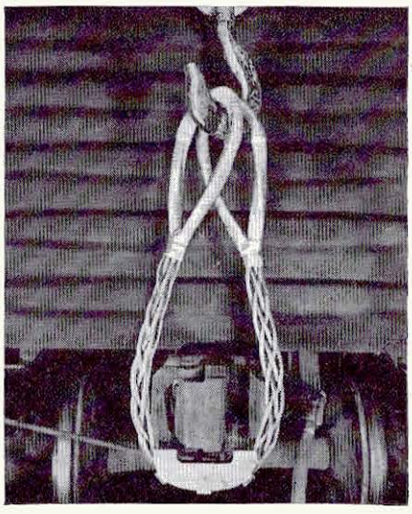

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For additional information, use postcard on pages 63, 64

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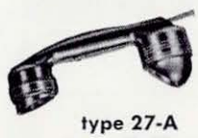

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Handset for Noisy Locations Pushbutton control raises reception level 12 db above normal, and reduces sidetone. Ideal for shops, or wherever surrounding noise makes reception difficult.

type 27-B

Handset for the Hard-of-Hearing Same as the Type 27-A, but equipped with a special pushbutton by which the 12 db higher voice reception can be *locked in position*. Does not interfere with normal reception.

type 25

Standard Railroad Dispatcher's Handset Pressing button places resistor in series with *receiver*, increasing transmitter output while *talking*. Voice goes through clear and strong.

type 25

Anti-Noise Handset A modification of the standard Type 25 (above); pressing button short-circuits *transmitter*, eliminating surrounding noises while *listening*. Gives a quieter circuit.

type 25

For Auxiliary Functions This model of the Type 25 uses the pushbutton for operations entirely separate from the handset—for example, to cut in an amplifier before transmitting.

type 22

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Vol. 131, No. 18 October 29, 1951

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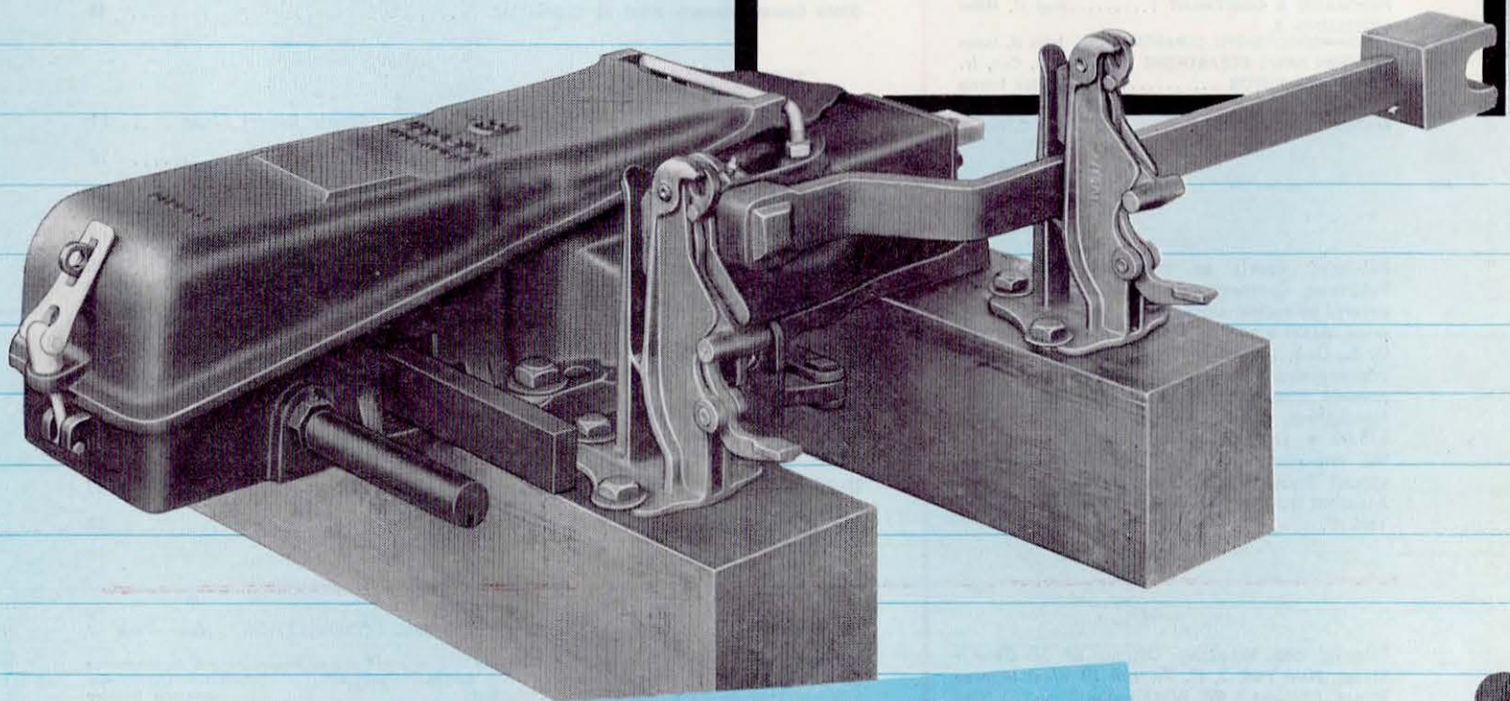

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WEEK AT A GLANCE

CURRENT RAILWAY STATISTICS

Operating revenues, eight months	
1951	$ 6,762,632,765
1950	5,885,664,117
Operating expenses, eight months	
1951	$ 5,359,781,366
1950	4,559,522,971
Taxes, eight months	
1951	$ 752,009,833
1950	651,181,004
Net railway operating income, eight months	
1951	$ 513,636,133
1950	556,537,130
Net income, estimated, eight months	
1951	$ 326,000,000
1950	372,000,000
Average price railroad stocks	
October 23, 1951	54.66
October 24, 1950	49.07
Car loadings, revenue freight	
41 weeks, 1951	32,069,681
41 weeks, 1950	30,251,651
Average daily freight car surplus	
Week ended October 20, 1951	2,889
Week ended October 21, 1950	2,245
Average daily freight car shortage	
Week ended October 20, 1951	18,899
Week ended October 21, 1950	35,194
Freight cars delivered	
September 1951	8,533
September 1950	5,131
Freight cars on order	
October 1, 1951	140,135
October 1, 1950	106,611
Freight cars held for repairs	
October 1, 1951	97,176
October 1, 1950	107,398
Net ton-miles per serviceable car per day	
August 1951 (preliminary)	1,074
August 1950	1,093
Average number railroad employees	
Mid-September 1951	1,286,469
Mid-September 1950	1,283,514

In This Issue . . .

MECHANICAL COOLING: Substantial operating economies and better transportation, particularly for frozen foods, appear likely to be the doubly desirable results of mechanical cooling of refrigerator cars, judging, at least, from the page 35 report of such installations on F.G.E.X. equipment. Other feature articles in this issue cover metergage diesel locomotives for the Argentine; the Wabash method of photographic handling of correction accounts; and 1950 wood preservation statistics. Editorials deal with organization of railroad public relations departments, the "union shop," and pooling of sleeping car services.

"BRUCK": When even a two-car motor train proved too big for economical service on the Great Northern's Kalispell branch, the road substituted direct highway service by "bruck"—a hybrid bus-truck, with seats for 21 passengers and an 875-cu. ft. compartment for mail, baggage and express. The odd vehicle is described and pictured on pages 38-39.

IN THE NEWS: Southern orders 100 diesels; C. B. & Q. 3,250 freight cars.—F. G. E. may buy 1,000 reefers.—P. R. R. to build new diesel facilities at Pitcairn, Pa.—Mercier to retire from S. P. presidency.—Massachusetts okays use of two-man crews on B. & A. RDCs.—Carpi tells Eastern Industrial Traffic League railroads are "in" tariff research "up to the hilt" . . . "we are all imbued with much optimism."—Canada to "go it alone" on St. Lawrence.—Plowman heads A. S. T. & T.—September locomotive orders set new monthly record; October 1 order backlog is 1,827 units.

In Washington . . .

CAPITAL HIGHLIGHTS: First-quarter steel allocations to be "re-examined."—Net gain of 4,000 freight cars realized in September.—Firemen's brotherhood issues strike instructions.—Railroads ask new hearing in Ex Parte 175; want full 15 per cent increase.—I.C.C. gets presentations opposing and supporting its accelerated amortization ruling, as D.P.A. sets "tougher" policy.—Mass of legislation enacted as Congress adjourns to January 8.—I.C.C. approves Bulwinkle Act agreement of Southern railroads.

"FORGOTTEN" POLICY: It's much too early, of course, to determine what, if any, significance it will have, or what, if any, action it will produce, but Senator Bricker's progress report on a Senate

WEEK AT A GLANCE

subcommittee's investigation of transportation makes interesting and, on the whole, heartening, reading. Few railroad men, at least, are likely to disagree with the report's conclusion that "existing conditions in the transportation industry are not satisfactory because the declared policy too frequently has been forgotten." The report is summarized on page 11.

. . . And Elsewhere

HIGHER PER DIEM? It could be that per diem will soon be raised from the present $1.75 to $2. At least that's the recommendation that came out of a recent meeting of the general committee of the A.A.R.'s Operating-Transportation Division, for submission to A.A.R. directors for their consideration.

SLAP ON THE WRIST: A federal court at Cleveland has reportedly fined the Brotherhood of Railroad Trainmen $1,000 and placed the entire organization on probation for a period of one year, on charges of contempt of court arising from the epidemics of "illness" which led to widespread work stoppages by members of the brotherhood last December, and again early this year. The sentence apparently means that the probation office in Cleveland will become a sort of "conscience" for the brotherhood, which will have to face additional contempt charges if its members engage in unauthorized walkouts within the next 12 months.

PITY THE POOR TRUCKERS! Thousands of the country's highway freighting executives were in Chicago last week for the annual hoe-down of the American Trucking Associations. For a whole week festivities—put on, we understand, entirely at the expense of suppliers—kept the city's social life in a whirl. No strictly business convention for many years can be compared with it. The boys were fat with growth and success. Strange, too, to find so many top executives aged 30 to 40.

"WHEN THE INEVITABLE PROCESS of deflation sets in . . . reduction rather than increase in rates will again be in order. Then value . . . once more will become a central factor in the inquiry." So Interstate Commerce Commissioner Clyde B. Aitchison, above, told the annual meeting of the National Association of Railroad and Utilities Commissioners. Other excerpts from Mr. Aitchison's speech are included in the account of the meeting on pages 45 and 46.

SEEING SPOOKS: Ghosts and witches traditionally travel abroad on Hallowe'en—but if there is one ghost which won't do any haunting on this or any future Hallowe'en it is the spectre of "railroad monopoly," laid forever by government bounty to waterway, highway and air transportation. The very physical impossibility of such a monopoly would make funny—if it were not so absurd—the "warning" by Chester C. Thompson, of American Waterways Operators, Inc., that the omnibus transportation bill (S. 1889), recently introduced in Congress, is "another monopolistic grab" by railroad bankers. Mr. Thompson's fears are apparently based on the bill's provision for a special tax on movement of freight on inland waterways, included in the bill in a modest effort to win back to the government some of the good money it has sunk in the muddy ditches of the Middle West.

WHO'S GOING TO PAY? New York newspapers recently carried a large display ad signed by P. W. Litchfield, chairman of the board of the Goodyear Tire & Rubber Co., stating, among other things, that "We must face the highway crisis now . . . The crux of the problem . . . is too few modern roads . . . We must start building a new national highway system now, designed for modern traffic needs and speeds." Not a word, of course, about protecting the highways we do have against abuse until new ones can be biult. Not a word, either, about the multi-billion dollar cost of new highways—nor about who's going to pay it.

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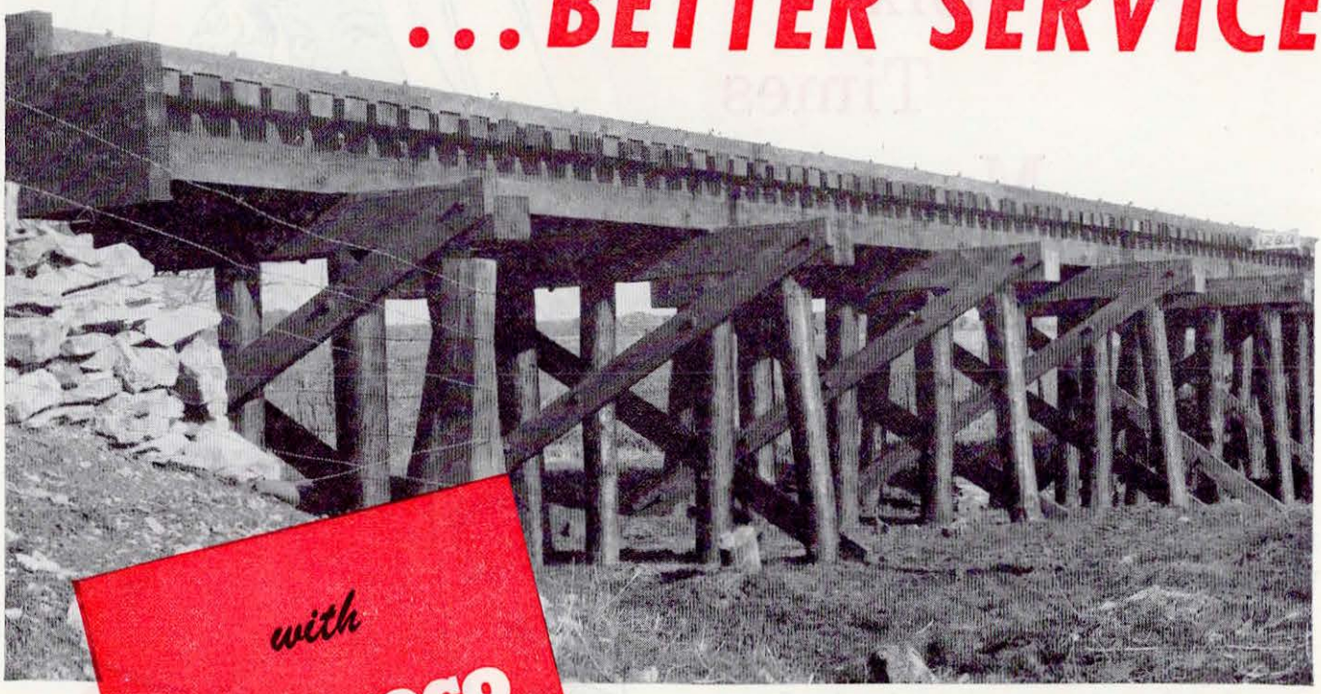

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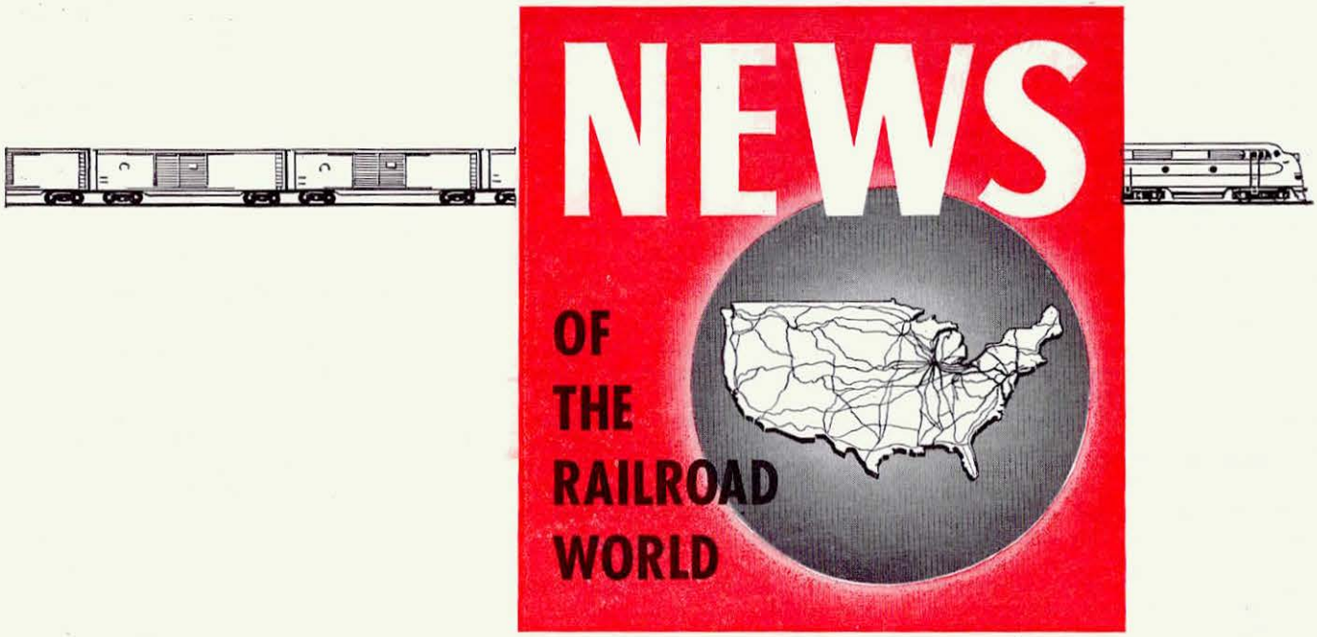


Declared Transport Policy Forgotten Too Frequently, Senate Report Finds

Bricker submits several recommendations of interstate commerce subcommittee which made comprehensive investigation

"Existing conditions in the transportation industry are not satisfactory because the declared policy too frequently has been forgotten," according to a "progress report" on the Senate Interstate and Foreign Commerce's Committee's investigation of domestic land and water transportation. The report was submitted to the Senate on October 19 by Senator Bricker, Republican of Ohio, a member of the subcommittee which conducted public hearings on the investigation under the chairmanship of former Senator Myers, Democrat of Pennsylvania.

The report carries a foreword by the chairman of the parent committee—Senator Johnson, Democrat of Colorado—who said that committee "has authorized with reservations the issuance of this progress report by Senator Bricker." Senator Johnson continued:

"It represents long and analytical study and lengthy hearings. . . .Upon the request of Senators Bricker and O'Connor [Democrat of Maryland], the information developed so far is being made available in this progress report. . . .However, the conclusions and recommendations which are extremely controversial and which have been incorporated in this report represent the views of the authors and have neither been approved nor disapproved by the Senate Committee on Interstate and Foreign Commerce."

The report, a document of 87 pages including tables and charts, opened with chapters on the scope of the subcommittee's investigation, the country's transportation system in general, and the history of regulation. Then came the discussion of the national transportation policy as set forth in the Interstate Commerce Act.

No "Fair Regulation"

No change in that declaration was recommended, the report said, and then went on to make the statement quoted above. Congress, it continued, is partly to blame for this forgetfulness with respect to the policy—because "a considerable body of legislation is inconsistent with the declaration of policy." Thus "'fair and impartial regulation of all modes of transportation' does not exist."

As examples of inequitable situations, the report cited exemptions in the regulatory laws "which immunize some 40,000 truckers from interstate regulation," the so-called bulk-commodities exemption applying to water carriers, and the application to railroads alone of the commodities clause and the long-and-short-haul clause. Also mentioned was the building with federal funds of water, highway, and air-transport facilities without reference to whether they will prevent the development of "sound economic conditions in transportation."

All of which led to a conclusion holding that the declaration should be made applicable "to all agencies of the federal government engaged in regulating or promoting any form of transportation." The coordination called for by the declaration "can never be attained so long as economic regulation and promotional activities continue to operate at cross purpose," the report said.

In discussing "the necessity for impartial regulation," the report asserted that regulation of the railroads "is not uniform with that of competing carriers." Meanwhile, it had condemned "discriminatory regulation," as "at best unjust," while, "in a time of emergency, it may be disastrous to the nation."

"Significantly," the report also said, "the railroads find little fault with the burden of regulation in those areas where they retain the character of monopoly. This is understandable, for in those areas the theory in which regulation was conceived and administered is applicable to the facts of operation. Where the railroad is forced by competition to fight for a fair share of the traffic, that is, in a competitive area, it must contend against competing carriers under protective regulation, while the railroad itself, in the eyes of the regulatory authorities, is in the nature of a monopoly. The absurdity of such a situation is evi-

dent; the tragic consequence has been, and is, a serious crippling of the railroads and, therefore, of the national transportation system."

The problem of correcting this situation "is not easily solved," the report added. Nevertheless, it went on to recommend several specific changes in regulatory laws which are now "in contravention of the principle of impartial regulation." These recommendations included calls for repeal of the long-and-short-haul clause, removal of the agricultural-commodities exemption from the Motor Carrier Act, and of the exemption for water transportation of commodities in bulk from Part III.

Trucking and Trip Leasing

There was also a recommendation calling for more rigid regulation of contract truckers. "This subcommittee believes," the report said, "that the contract carrier has gone far beyond the scope intended when Congress enacted the law applicable to him. Continued expansion of operations, along the pattern now evident, will seriously damage the common carriers and the national transportation system. We urge that Congress take appropriate steps to restrict the scope of operations of contract carriers to that of substitution for private carriage, and that contracts between shippers and contract carriers be subjected to public regulation."

As to private trucking, the report suggested that "consideration be given to drawing a sharper definition, and that, in any event, remedial steps be taken in the leasing and exemption fields. Primarily, Congress must insure that private carriers which invade the fields of contract or common carrier be regulated in strict accordance with the true nature of their operations."

This brought the report to its discussion of trip leasing. And in that connection it put the subcommittee in disagreement with the view that regulation of leasing is outside the jurisdiction of Congress. The subcommittee, the report added, is "inclined to believe" that the I.C.C. "is not without present authority to cope with the vast majority of the problems arising under the practice." However, if the commission does need additional authority, the subcommittee would have Congress pass the necessary legislation.

With respect to dormant water-carrier rights, the subcommittee would give the commission authority to revoke them "in the absence of special circumstances." As to water-competitive rail rates, the report asserted that the railroads should be allowed to publish "compensatory" rates—"in the absence of positive showing of destructive damage to the water-carrier segment of the national transportation system." That position was based in part on this finding: "To force traffic by regulation into less-economic channels is distinctly contrary to the declaration of the national transportation policy, and . . . should not be condoned except for the most urgent reasons."

The commodities clause was considered next. The consideration led the subcommittee to conclude that the clause should be made uniformly applicable to competing carriers—"if for no other reason than to insure the fair and impartial regulation required by the national . . . policy."

Would End Water Subsidies

Federal aids to land and water transportation were made the subject of considerable discussion which included comment on the theory of subsidizing water transportation to keep railroad rates low. The subcommittee rejected the theory.

"Subsidies to inland water transportation as a means of depressing rail freight rates," the report said, "might have been sound policy in 1850. One hundred years ago railroads had a virtually complete transportation monopoly and were not regulated by the federal government. . . .Regulation of railroad rates by the I.C.C. is far more equitable and efficient than any attempt to regulate rail rates through a multi-billion dollar subsidy program."

The report proceeded to come out for the imposition of user charges on inland waterways. "In our opinion," it said, "the 'economical and efficient service' which the national transportation policy is intended to promote means a service for which shippers bear the full cost."

AT NORWICH UNIVERSITY, Northfield, Vt., on October 6, Mrs. Ernest M. Harmon, wife of the university president, christened Central Vermont locomotive No. 700 as "Norwich University," making it probably the first steam locomotive in American railroad history to carry the name of an advanced institution of learning. With Mrs. Harmon in the picture at the left is Maynard A. Metcalf, vice-president of the C.V., who presented the locomotive to Mrs. Harmon for christening. On the right, above, Bruce Williams, a member of the university's cadet corps, reenacts the driving of the golden spike which marked the completion of America's first transcontinental railroad. In the background is the old C.V. wood-burning locomotive No. 40, which was used, along with a replica of an early Baltimore & Ohio locomotive, in the reenactment pageant. Both events were part of the celebration by the university—which is believed to be the first American civilian school of engineering—of the 1851 graduation from it of Major General Grenville M. Dodge, builder of the Union Pacific and other western railroads (*Railway Age*, September 24, page 67)

After a like appraisal of the highway situation, the report suggested that "Congress should provide the leadership in determining the proportionate share of highway costs which should be borne by heavy motor carriers, so that proper user costs may be fixed. Also, the report recommended "that an extension of the federal transportation tax to carriers now exempt be studied to the end that these motor carriers might bear at least a partially equitable share of the federal cost of maintaining our highways."

A 26-page section of the report was devoted to "The Particular Problems of the Railroads." The subcommittee felt "justified" in doing this because the railroads are the "backbone of the American transportation system," the report explained.

The review of railroad revenues emphasized how they have "lagged behind, far behind, increases in prices and wages." The report went on to refer to the carriers' "low earnings" during these "generally prosperous times"; and to warn that "the railroads as a whole are rapidly approaching disaster."

"To be on safe ground," the report continued, "railroads should be earning a return on their investment comparable to that of the 1926-30 period, or 4.76 per cent. To do this, however, railroads somehow must attain a net income of $734,000,000 greater than their net income for 1949."

As to managerial efficiency, the subcommittee was of the opinion that "many of the deficiencies of which management has been accused stem from the atrophy of managerial incentives caused by the tendency of the Interstate Commerce Commission to substitute its judgment for that of management." Meanwhile, the report said that this does not imply "that there is no room for improvement in the ingenuity and initiative of railway management."

"Head-End," Commuter Losses

Railroad capitalization "seems reasonable," the report continued. It went on to say that losses from head-end business "must be curtailed unless the nation is ready to accept wholesale abandonment of train passenger service." Mail pay should be "high enough to yield a reasonable profit," as the subcommittee saw it. There was also a recommendation that parcel-post rates be put on a compensatory basis, thus relieving the Railway Express Agency of the burden of competing with a subsidized government service.

As to commutation-service losses, it was suggested that remedies short of abandonments, if there be any, "will have to be devised through the joint efforts of the railroads and local governments." The discussion of railroad rates stated the "basic problem" to be "whether and to what extent the jurisdiction of the commission over railroad rates should be modified." On that matter, the subcommittee "agrees that revision of section 15a is necessary to insure that sufficient emphasis is placed on affording the carrier an over-all fair return on capital."

The subcommittee would also modify rate procedures. "It would seem desirable," the report said, to restore to railroad management, subject to certain safeguards, the right and responsibility of making and altering railroad rates within a spread established after hearing by the commission. Under this plan the commission would determine maximum and minimum rates, adjustable by the commission after hearing, in accordance with economic and industry conditions."

The report's general "conclusion" was the following:

"The development and preservation of a strong, healthy, well-balanced transportation system in this country should be and is the aim of our national transportation policy. That aim has not failed of attainment because of any major defect in the expressed policy, but it has failed to be reached because actions of Congress and of the commission have been taken in disregard of essential elements of the national transportation policy.

"The recommendations contained herein are made for the purpose of correcting some of the more glaring defects in the application of our national transportation policy and to bring our transportation system to that state of health and strength which is admittedly so essential to the maintenance of a sound economy and to the very security of the nation. Delay in the effectuation of these needed reforms can only hasten the eventual breakdown of the system which will inevitably occur unless some such corrective measures are employed."

STATOR FOR AN electric power generator, the largest ever built by the General Electric Company's Turbine division at Schenectady, N. Y., is shown being loaded for shipment to the Public Service Company of Northern Illinois. Weighing more than 200 tons, it required a specially constructed railroad flat car and special handling. Due to complicated routing and freight problems, the stator could be moved only during daylight hours over a special route. The stator is a part of a 110,000-kw., tandem-compound, 3600-r.p.m., triple-flow turbine-generator rated 121,000 kw., which will be installed in the Public Service Company's Waukegan, Ill., station

Tariff Study Group Program Already Mapped Out—Carpi

The Railroads' Tariff Research Group, recently established by the carriers to do a full-time job of studying ways and means to simplify and otherwise improve tariffs (*Railway Age*, September 3, page 37), has already mapped out a program which it is now implementing, Fred Carpi, traffic vice-president of the Pennsylvania, said in Philadelphia on October 25.

Addressing a meeting of the Eastern Industrial Traffic League in the Benjamin Franklin Hotel, Mr. Carpi added that no one close to the problem of tariff simplification is expecting the group — which operates under direction of an administrative committee of 12 railroad traffic executives with advice and counsel of a cooperating committee from the National Industrial Traffic League—to make spectacular or dramatic developments overnight.

"It is the intention of the railroad committee," he continued, "to give the Railroads' Tariff Research Group free rein in pursuing their studies and in reaching their own conclusions as to what can be done by way of remedies. We, as well as the shippers' committee, will meet with the research group at stated intervals to review their progress and to consider such recommendations as they have ready for us, but we have given them no instruction other than the simple charge 'find the

things that are giving tariff users trouble; the causes and the remedy and bring your findings to us.' Money has been no deterrent in the effort to get the program on its way."

It is rather early, Mr. Carpi said, "but we are all imbued with much optimism. We think our approach is sound; we think the composition of our research group is talented and well balanced. The railroads, the shippers and the Interstate Commerce Commission are in this thing up to the hilt and if enthusiam and the will to cooperate continues, we cannot help but make progress . . . The outlook is promising on all fronts and we hope that we shall merit and receive the continued active and thoughtful participation of the shippers of the country in this significant effort to improve our tariff picture. With your help we can accomplish a great deal; without it we must, perforce, fail."

Many Late Enactments as Congress Quits in Rush

Passage of a retirement-act amendment and the new tax bill highlighted final activities of Congress before it adjourned October 20. Other pending legislation, where Congress took no final action, did not die with adjournment but will be carried over to the new session convening January 8, 1952.

Among matters thus carried over will be the St. Lawrence Seaway project, twice defeated in committee during the first session. Other legislation, ranging from rewriting the Interstate Commerce Act to separation of mail and subsidy payments to air lines, also awaits Congress' return.

The retirement-act amendment, which cleared Congress the day before adjournment, was in the end a compromise between House and Senate versions. Both had agreed to increased benefits, but there was disagreement over increasing the taxable base and placing men with less than 10 years' service under social security. (*Railway Age*, October 22, page 58.)

As the bill finally passed, no increase was made in the taxable base, but the House gave in and accepted the 10-year rule. The Senate had also wanted to increase the taxable base from $300 to $350 a month.

Integration between railroad retirement and social security, as provided in the amendment, will not occur until "some time during the year 1953." Thus there is ample time to conduct the study, to which both houses have already agreed, on the relationship between the two retirement systems.

The House approved the final version 399 to 0. This bill provides a 15 per cent increase in pension and annuity benefits, a 33 1/3 per cent increase in survivors' benefits, and a 25 per cent boost in lump-sum benefits. The spouse of a retired railroad employee may receive benefits up to $40 a month.

As the measure cleared the Senate, Senator Hill, Democrat of Alabama, announced this final version had the approval of the Railway Labor Executives Association and the Brotherhood of Railroad Trainmen. He said the Association of American Railroads also was "in accord" with the terms of the bill.

The tax bill, which also passed Congress at the very end of the session, is expected to raise an estimated $5.6 billion on an annual basis. Under the bill, corporate tax rates will be increased from 47 per cent to 52 per cent on income over $25,000. This provision is retroactive to April 1, 1951, and terminates March 31, 1954.

Other provisions in the tax bill will up the capital gains tax from 25 to 26 per cent. Excess profits tax liability is increased, effective July 1, 1951. There are also several excise tax increases, including those on trucks and busses. New taxes include a two-cents-per-gallon levy on diesel fuel for highway use.

Back mail payments which the I.C.C. authorized the railroads in December, 1950, shall be included in income for the year in which service was rendered. No interest will be charged on resulting tax differences for the period prior to July 1, 1951.

During final days of the session, Congress also cleared a number of appropriation bills, including 1952 fiscal-year funds for the Commerce Department, and the army's so-called civil functions. The civil functions appropriation includes $192,657,613 for rivers and harbors, and $316,544,100 for flood control. This bill contains a provision stipulating that no funds shall be spent on the Tennessee-Tombigbee waterway project.

Contained in the Department of Commerce appropriation were funds for the Civil Aeronautics Administration, and the Bureau of Public Roads. The bureau received $325,000,000 for its federal-aid highway program, while the C.A.A. was authorized $155,000,000 for its various air transport activities.

Still another appropriation bill passed at the last minute contained funds for the Defense Transport Administration. This agency received $2,543,750 to carry out its program through June 30 next year. Altogether, at the time of adjournment, Congress had appropriated approximately $91 billion during the session.

On October 19, Senator Bricker, Republican of Ohio, submitted to the Senate a "progress report" on the Senate interstate commerce subcommittee's investigation of domestic land and water transportation.

Section 77 of the Bankruptcy Act was amended by another bill passed before adjournment. This bill, signed by the President October 24, permits the issuance of trustee certificates to provide funds for safety equipment. Such certificates will take prior lien over all other existing obligations.

The first session of the Eighty-Second Congress was investigation-minded. Railroads were not exempt. The Senate Labor and Public Welfare Committee got involved in the long-pending "op" dispute, while members of the Senate Interstate Committee looked over the situation on the New York, New Haven & Hartford.

Investigation of the "op" dispute by the Labor committee led to a report in which seizure of the railroads by the government was criticized as "legal fiction without substance." A minority group on the committee dissented, saying they did not think it a "proper function" of a Senate committee to hold hearings and publish a report on a pending labor-management dispute.

Another matter before the Senate during the session was the reappointment of Interstate Commerce Commissioner John L. Rogers. He was confirmed for a new term on the commission only after extensive hearings before the Senate Interstate Commerce body. Labor groups opposed him for some of his actions in regulating motor carriers.

Congress also sent to the White House a measure reducing size and weight limitations of parcels which may be sent through the mail. The bill places a size limitation of 72 inches in length and girth combined and a weight limitation of 40 pounds in the first and second zones. The weight limit is 20 pounds in the third to eighth zones. President Truman had not signed the bill as this issue went to press.

Other congressional action during the session included confirmation of Delos W. Rentzel as Under Secretary of Commerce for Transportation, succeeding Major General Philip B. Fleming. There were hearings on freight car shortages in the grain states of the northwest, and bills were passed authorizing Canadian vessels to carry grain and ore between United States ports on the Great Lakes during 1951.

I. C. C. Gets Presentations on Accelerated Amortization

More than 100 railroads have joined in asking the Interstate Commerce Commission to rescind its recent notice setting forth a proposed order under which carrier reports to the commission would no longer reflect accelerated amortization of equipment and facilities acquired to handle defense-traffic loads. Meanwhile, the commission has received from other railroads and from the National Coal Association presentations supporting the proposed order

as now written or with the addition of so-called tax-equalization provisions.

The railroad presentations on the foregoing bases had been expected after the conflicting views were pointed up in discussions at October 2 and 3 meetings of railroad accounting officers in Washington, D. C. (*Railway Age* of October 8, page 32.) The commission's notice announced a new policy which would have the effect of requiring normal depreciation with respect to the facilities involved—unless it were shown "definitely" that they would have "no use in transportation service after the emergency." (*Railway Age* of September 3, page 38.)

This would not automatically end accelerated-amortization accounting for income tax purposes, but some railroad officers are fearful that it might make more difficult the obtaining of the required certificates of necessity from the Defense Production Administration. D.P.A. has recently announced a "tougher" policy with respect to the granting of such certificates.

Submitted by W. L. Price

The protest against the proposed order was submitted on behalf of protesting roads by Walter L. Price, vice-president of the Baltimore & Ohio and chairman of the "committee-of-six" which was appointed at the October 3 Washington meeting and assigned the task of framing a presentation to the Commission. Generally, the presentation restates and amplifies opposition arguments made at the October 3 meeting and in previous discussions of the matter.

Among other contentions, the presentation argued propositions to the effect that the proposed order would "inflate carriers' earnings during the emergency period and would also cause or invite dissipation or diversion of such inflated earnings"; that it would "artificially" increase state taxes payable by the railroads; and that it would "terminate the present sound and realistic accounting for amortization and substitute unsound and unrealistic accounting."

Ask Optional Accounting

The protesting roads asked to be heard in oral argument if the Commission is not disposed to rescind the notice and cancel the proposed order on the basis of the written presentation. The latter's closing prayer was a request that the accounting involved be made optional—"if after full consideration the Commission determines that some provision should be made in the accounting classifications for recording only normal depreciation. . . ."

The suggestion that the order should be amended to add tax-equalization provisions was made in a joint presentation filed on behalf of four roads—Chesapeake & Ohio, Seaboard Air Line, Chicago & North Western, and Chicago, St. Paul, Minneapolis & Omaha. The tax-equalization idea was submitted to the Accounting Division, A.A.R., some-

THE EIGHT RAILROAD MEMBERS of the Harvard Business School's 20th Advanced Management Program—whose full titles were given in *Railway Age* October 15, page 68—meet informally with members of the school's faculty. Left to right, in the first row, are Eugene D. Moody, S. P.; Professor George P. Baker; Assistant Dean Harvey P. Bishop; and Claude P. King, St. L.-S. F. In the second row, in the same order, are Edward B. Kysh, S. P. (Texas & Louisiana Lines); Glenn C. Lace, R. E. A.; Harry C. Munson, W. P.; John W. Smith, S. A. L.; William R. Gerstnecker, P. R. R.; Assistant Professor Gayton E. Germane; and Harry C. Schmidt, D. L. & W.

time ago by Director C. W. Emken of the Commission's Bureau of Accounts and Cost Finding.

It contemplates establishment of a new tax-equalization account in the net railway operating income group. During the period that amortization allowances are obtained for tax purposes, this new account would be charged with the difference between the tax saving so obtained and the amount of tax saving that would have obtained if normal depreciation charges had been claimed. The amounts so charged would be credited to a reserve account and would, subsequent to the amortization period, be cleared by monthly credits over the remaining life of the property.

The four-road group advised the commission that failure to provide such a set-up "will grossly inflate book income for the first five years and grossly deflate book income of the subsequent 20 years, by reporting the entire tax reduction referrable to service loss in the first period."

There was another railroad presentation, submitted by the Chicago, Rock Island & Pacific alone. It was signed by that road's general auditor, H. H. Siddall. It supported the proposed order with arguments to the effect that any other accounting plan "would not be good accounting."

The National Coal Association also supported the proposed order. It argued that there was no "need or justification" for asking users of railroad service to reimburse the carriers for the "major part" of their investments in equipment and facilities over the "short term of five years." The "general practice" in utility accounting, the Coal Association also said, has been to prohibit rapid write-offs where the "defense" facilities "are in reality but part of the normal growth and expansion of the industry and will continue in service well beyond the emergency."

Roads Seek Full Increase of 15% in Ex Parte 175

Based on the contention that operating expenses have continued upward while revenues have declined, the railroads last week asked the Interstate Commerce Commission for a new hearing in Ex Parte No. 175.

The roads want the commission to reconsider its decision of last August and authorize a full 15 per cent freight rate increase. In their petition filed last March the roads requested a 15 per cent increase; but the I.C.C. authorized only a 6.6 per cent boost. (*Railway Age*, August 20, page 55).

Operating expenses in September went up $59,000,000, while operating revenues, with the new rates in effect, declined $16,000,000 below a year ago, the railroads said. Net railway operating income in September was down 41 per cent from the same month last year.

Revenues from present rates are "insufficient to meet the railroads' operat-

ing expenses, rents, taxes and fixed charges; to make necessary capital improvements; to pay installments on existing equipment obligations and make down-payments on necessary new equipment, and to pay dividends on any reasonable basis," the roads told the commission.

In the first nine months of this year, the railroads had an estimated net operating income that was approximately $94,000,000 less than that of the corresponding period last year even though the first half of 1950 was a period of low traffic and earnings, the carriers said.

If an additional rate increase is authorized, as now requested, it would yield about $650,000,000 on an annual basis, according to railroad estimates. This assumes intrastate rates would increase in line with the interstate increases.

The new increases would actually amount to about 7.2 per cent for the country as a whole, the railroads said. The boost would be subject to "hold-downs" on some commodities.

Net Gain of 4,000 Freight Cars Realized in September

Class I railroads and their car-line affiliates increased their total freight-car fleet by nearly 4,000 cars in September, according to the latest monthly review of "The National Transportation Situation," issued by Chairman A. H. Gass of the Car Service Division, Association of American Railroads. Figures in Mr. Gass' report put the September installations at 7,816 cars, and the retirements at 3,882 cars.

The net additions included 2,264 box cars and 1,510 gondolas, Mr. Gass noted. Hopper car ownership, he added, "continues its gradual decline, while the backlog of hoppers on order (39,954 as of October 1) continues to mount." Nearly 30,000 cars were given heavy repairs in September, the C.S.D. chairman also reported. This compared with an August total of 34,800.

Mr. Gass' further comment on the new-equipment situation included this statement: "The fact that more than 83,000 freight cars have been ordered so far in the year 1951, despite the prospect of more than a year's delay in obtaining delivery, is striking evidence of the railroads' intention to do everything within their power to raise the available supply of freight cars to an adequate level."

Meanwhile, Mr. Gass had given his usual appraisal of equipment conditions by types of cars. His discussion of the situation with respect to open-top cars included reference to the fact the transportation of iron ore "to meet unprecedented requirements of the steel industry" has been "among the major railroad problems this year."

Continuing, the C.S.D. chairman pointed out that the 90-million-ton lake ore program was made 82.6 per cent complete during the first three-fourths of the lake navigation season. The 90-million-ton goal will probably be exceeded by "at least a million tons," Mr. Gass predicted. He went on to note that there has also been a supplementary all-rail movement of ore which will have amounted to a total of about six million tons by the end of the year.

"It is possible, therefore," Mr. Gass continued, "that the total ore moved from the Northwest to the steel industry will be in the neighborhood of 97 million tons during 1951, considerably exceeding the record of 92½ million tons handled in 1942."

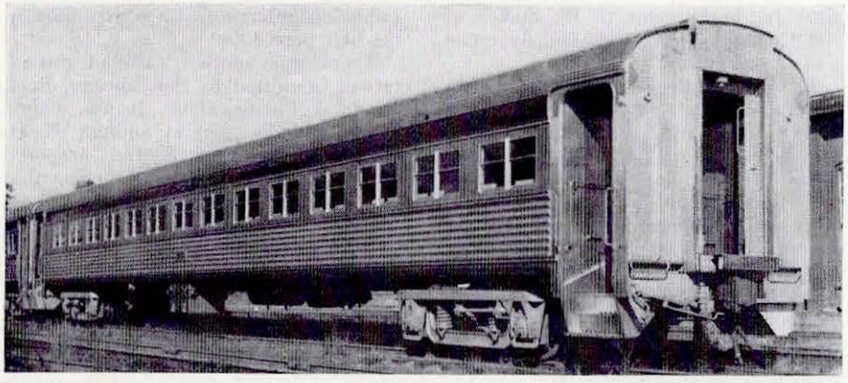
Also "approaching record levels" is the movement of coal for export. In that connection Mr. Gass presented figures showing that overseas shipments of coal in September totaled 3.7 million tons while the nine-months total was 21.8 million tons. Comparable figures for September 1950, and last year's first nine months were 157.7 thousand tons and 1.3 million tons, respectively. "The present program indicates that coal shipments to foreign countries other than Canada will continue at the rate of at least 3½ million tons per month well into 1952," Mr. Gass said.

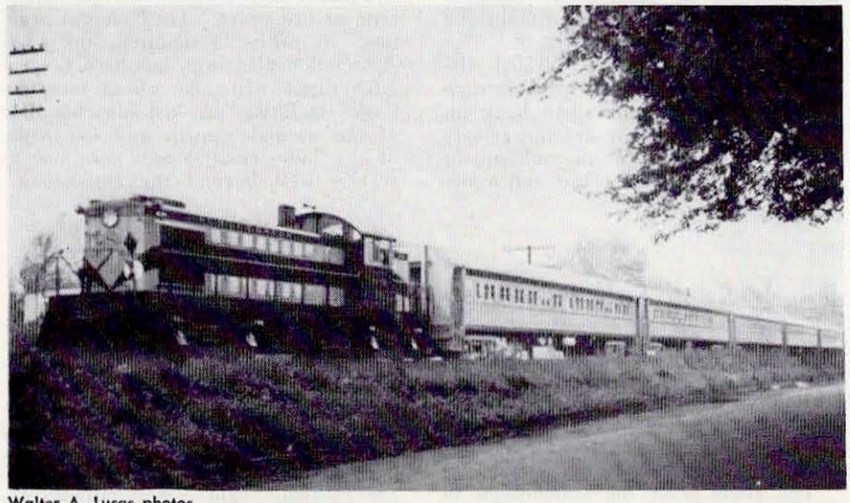
Shortages "Not Alarming"

The C.S.D. chairman reported "shortages" of practically every type of car. Generally, however, he considered them "not alarming." In reporting that the average daily shortage of box cars for the week ended October 6 was 5,926 cars, he noted that this was 13,495 cars less than the average for the corresponding week last year.

As to freight-car performance, Mr. Gass reported that net ton-miles per serviceable car per day "climbed to 1,074 during August, a new high for the year, as compared to the year's low record of 954 ton-miles per car per day made in July." The August 1950 figure was 1,093.

Reports from 735 communities in various shipper-board districts indicated that cars detained beyond the free time of 48 hrs. averaged 14.72 per cent of those placed in September. This compared with 14.54 per cent the previous month and 21.74 per cent in September 1950. For the first nine months





Walter A. Lucas photos

SIXTEEN OF THESE NEW 133-PASSENGER SUBURBAN COACHES, built by the Budd Company, are now going into service on the New York, Susquehanna & Western. With a few cars rebuilt from the road's present fleet and some Budd rail diesel cars acquired about a year ago, they will handle the bulk of the Susquehanna's passenger service out of Jersey City, N. J.

of this year, average detention was 14.7 per cent, compared with 21.48 per cent for the corresponding period last year.

S.P. Seeks to Raise Special Coach Fares

"To help cover rising costs of passenger train operation," the Southern Pacific on October 11 asked the California Public Utilities Commission for permission to increase the special low intrastate coach fares on its San Joaquin Valley and Coast route trains. The proposed increases will not affect local San Francisco suburban services.

In announcing the proposed increases, Claude E. Peterson, vice-president, system passenger traffic, pointed out that the new fares would not come up to the 2.5 cent-a-mile level which the California commission authorized in 1948. The maximum increase between San Francisco and Los Angeles will still be less than $1 and the fares will remain at a point below two cents a mile. Mr. Peterson said basic costs of passenger train operation — fuel, wages, locomotive and train supplies, car and locomotive repairs, etc. — had gone up 130 per cent since 1941, while the road's average revenue per passenger-mile had increased only about 44 per cent in the same period.

The S.P.'s petition seeks — in addition to increases in the San Francisco-Los Angeles and Sacramento-Los Angeles fares — higher parlor car fares on the streamlined "Daylights" and higher coach fares between San Francisco and Monterey peninsula points.

567 Salaries of $20,000 Or More Reported in 1950

There were 567 railroad officers receiving compensation during 1950 at the annual rate of $20,000 or more, according to a compilation issued by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission.

The compilation, Statement No. 5151 of the bureau, shows that average compensation for the group amounted to $32,336. This was an increase from the average of $31,768 paid in 1949, when the number of officers included in the group was 518. These figures cover both Class I line-haul roads and Class I switching and terminal companies.

The total amounts paid to the $20,000-and-over group in 1950 and 1949 were $18,334,273 and $16,455,737, respectively. Twenty-four officers received 1950 salaries of $70,000 or more, while 238 of the 567 were in the $20,000-to-$24,999 salary class. These latter received 28.65 per cent of the total amount paid to the $20,000-and-over group in 1950.

In a brief comment on these figures, the bureau noted that the 567 officers in the 1950 group represented an increase of 90.27 per cent above the 298 in that group in 1942. The average compensation of members of the group was $30,573 in 1942, $1,763 less than the 1950 average.

Requirements for railroad reports to the I.C.C. in 1950, from which the bureau obtained its figures, also called for information from each road as to the five persons receiving the largest amounts of compensation during 1950, regardless of the salary basis. This listing, together with those persons in the $20,000-and-over group, made a total of 904 officers with respect to whose salaries returns were received.

The 904 received aggregate compensation in 1950 of $21,956,646, or an average of $24,288. This average in 1949 had been $22,989, and there were 878 officers in the group at that time. As the bureau noted, some or all of the top five officers of some rads did not receive as much as $20,000.

A. T. MERCIER SAYS HE MAY RETIRE SOON

In an informal remark following a talk before the Women's Traffic Club of San Francisco on October 18, A. T. Mercier, president of the Southern Pacific, intimated that he may retire shortly. His remarks were made in the presence of a reporter from the San Francisco Call-Bulletin, which later published a story "announcing" his intended retirement at the end of this year. The Southern Pacific has made no formal announcement, pending action by the board of directors, but in response to widespread inquiry has confirmed the substance of the Call-Bulletin story. The Associated Press subsequently reported that Mr. Mercier would be succeeded as president by D. J. Russell, now executive vice-president.

Truckers See Hope for "Easier" Weight Limits

The attitude of some state and federal officers towards maximum truck weight limits appears to be "softening," William Bresnahan, director of research of American Trucking Associations told the opening session of the associations' 18th annual convention in Chicago, October 22. Mr. Bresnahan said that he detected an easing up of the drive to reduce load limits on the nation's highways. He charged that "competitive interests" were out to ruin the trucking industry by seeking downward revision of present state weight limits.

R. L. Toolin, general traffic manager of the Great Atlantic & Pacific Tea Company, told the truckers that the railroads will intensify their competition. "The low cost operator in the transportation field is the railroad, but rail lines are not capitalizing on this fact," he said. Mr. Toolin felt that a downward revision of railroad tariffs would shift a lot of traffic now going on the highway back to the rails.

Suppliers of the trucking industry —notably the Firestone Tire & Rubber Co., and the Goodyear Tire & Rubber Co.—have issued strong statements supporting the truckers' demand for "adequate" highways. Harvey S. Firestone termed the present highway system "chaotic" and said that it was costing the American people thousands of lives and billions of dollars. He forecast the cost of a 10-year highway modernization program at $60 billion. He said that the principal problem was one of congestion. It is not always solved by the mere transformation of country lanes into superhighways, he added. Paul W. Litchfield of Goodyear said that 86 per cent of the nation's traffic funnels through only 23 per cent of the roads, and that "only one per cent of our paved highways are modern, multilane expressways."

Inland Steel Strike Settled October 19

The strike which halted all production at the Inland Steel Company's Indiana Harbor, Ind., plant on October 15 (*Railway Age*, October 22, page 18), has been settled. Workers began to return to their jobs on October 19 as union and company officers agreed to arbitrate the dispute. It has been estimated that 14,000 workers represented by the C.I.O. United Steelworkers lost a total of $516,000 in wages during the four-day tie-up, which cost some 70,000 tons of steel.

Railroad Women Meet In Santa Fe, N. M.

The National Association of Railroad Women — an organization devoted to exchange of ideas and experience among women executives in railroads and allied industries; to the planning of better utilization of "woman power" in railroading, and to discussion of improvements in railroad service — concluded its eighth annual convention on October 10 in Santa Fe, N. M.

During the three-day meeting, the membership heard talks by Fitzwilliam Sargent, vice-president, Budd Company; Dr. Thomas Sinclair, manager, school and college service, Association of American Railroads; R. M. Van Sant, director of public relations, Baltimore & Ohio; Helen Harney, personnel representative, Fred Harvey; Edith G. Krogh, secretary-treasurer, Transportation Association of America; and Mary Buchanan, assistant to director of public relations, Union Pacific. R. T. Anderson, general passenger traffic manager of the Santa Fe — official host during the meeting — tendered the group and its past presidents a reception and banquet, at which F. H. Baird, general passenger traffic manager, New York Central, stressed the value of women's contributions to the

railroad industry and urged wider use of their talents.

The following were elected to serve as officers for the coming year: President — Miss Norma Thompson, supervisor, courier-nurse department, Atchison, Topeka & Santa Fe; first vice-president — Edith J. Alden, secretary and assistant treasurer, Chicago, Burlington & Quincy; second vice-president — Hazel Roberta Williams, special representative, traffic department, Minneapolis & St. Louis; treasurer — H. Luiese Jones, interior designer, Seaboard; secretary — Eleanor K. Runquist, supervisor, personnel bureau, employee relations department, Pullman Company.

Membership in the association is by invitation only.

Strike Instructions Issued By Firemen's Brotherhood

The Brotherhood of Locomotive Firemen & Enginemen announced in Washington, D. C., on October 24 that it had mailed strike instructions to its members. The brotherhood is one of three operating unions involved in unsettled and long-stalemated wage and rules cases, the other two being the Brotherhood of Locomotive Engineers and the Order of Railway Conductors.

Issuance of the strike instructions followed upon a membership vote in which an "overwhelming majority" authorized the calling of a strike, a brotherhood spokesman said. No strike date was mentioned in the October 24 announcement.

With the railroads under Army control, since President Truman seized them in August, 1950, in the face of a strike threat posed by the O.R.C. and Brotherhood of Railroad Trainmen, the courts might be expected to enjoin a walkout. Nevertheless, a strike-threat maneuver might result in appointment of an emergency board to consider the B. of L. F. & E. case. Presumably the B. of L. E. could execute a like maneuver, but the O. R. C. case has already been passed upon by an emergency board.

First-Quarter Allocations Will Be "Re-examined"

The National Production Authority reported in a recent press release that "a Defense Production official" had said that the first-quarter railroad equipment program "will be re-examined" in view of arguments made by members of the Railroad Freight Car Component Parts Manufacturers Industry Advisory Committee and the Locomotive Builders Industry Advisory Committee. The arguments were made at October 17 meetings of the committees in Washington, D. C.

Allocations under the Controlled Materials Plan for 1952's first quarter had been announced October 12. They contemplate construction in the quarter of only 20,000 freight cars and 636 locomotives for domestic service. (*Railway Age*, October 22, page 18.)

As the N.P.A. press release reported their reaction, members of the committee representing manufacturers of freight car component parts said: "Unless production of more railroad equipment is authorized . . . for the first quarter and succeeding months, the nation's railroads may be unable to support a total-war economy should the need arise."

The committee members, the release continued, asked whether the reduction from the current quarter's allocations was "part of a long-range plan to reduce their production or is temporary." Unless the program will expand again, "committee members said they may have to convert their facilities to production of other types of goods," N.P.A. added.

The locomotive builders' committee, as the release put it, "also complained," one committee member saying his company would be compelled to close a plant employing 2,500 persons. Other members "reported that similar labor reductions would occur."

Freight Car Loadings

Loadings of revenue freight in the week ended October 20 totaled 886,648 cars, the Association of American Railroads announced on October 25. This was an increase of 17,965 cars, or 2.1 per cent, compared with the previous week; a decrease of 4,582 cars, or 0.5 per cent, compared with the corresponding week last year; and an increase of 297,560 cars, or 50.5 per cent, compared with the equivalent 1949 week, when major coal and steel strikes were still in progress.

Loadings of revenue freight for the week ended October 13 totaled 868,683 cars; the summary for that week, as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, October 13

District	1951	1950	1949
Eastern	140,405	148,678	112,531
Allegheny	170,664	174,476	90,180
Pocahontas	66,769	66,125	19,692
Southern	134,596	138,549	101,904
Northwestern	144,278	150,007	83,503
Central Western	144,916	144,298	128,989
Southwestern	67,055	66,756	47,149
Total Western Districts	356,249	361,061	259,641
Total All Roads	868,683	888,889	583,948
Commodities:			
Grain and grain products	54,484	55,369	52,950
Livestock	18,933	17,247	19,512
Coal	160,411	163,786	51,368
Coke	16,003	16,273	3,905
Forest products	48,525	49,073	40,014
Ore	78,904	77,253	7,582
Merchandise l.c.l.	75,868	88,953	88,476
Miscellaneous	415,555	420,935	320,141
October 13	868,683	888,889	583,948
October 6	858,750	863,903	574,228
September 29	864,573	880,186	658,128
September 22	864,310	870,529	661,468
September 15	850,812	866,658	743,022
Cumulative total 41 weeks	32,069,681	30,251,651	28,971,154

In Canada.—Carloadings for the week ended October 13 totaled 81,812 cars, compared with 88,078 cars for the previous week, and 81,204 cars for the corresponding week last year, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
October 13, 1951	81,812	33,913
October 14, 1950	81,204	35,060
Cumulative totals for Canada:		
October 13, 1951	3,282,283	1,417,862
October 14, 1950	3,006,824	1,272,170

MORE NEWS ON PAGE 49

Additional general news appears on page 49, followed by regular news departments, which begin on the following pages:

Organizations 50
Supply Trade 51
Overseas 51
Equipment & Supplies 52
Car Service 52
Construction 54
Financial 54
Railway Officers 54

Canada to "Go Ahead" On St. Lawrence

Canadian External Affairs Minister Lester B. Pearson told the House of Commons at Ottawa last week that the government is prepared to recommend that Canada go ahead with the St. Lawrence waterway and power project without waiting for the United States. The government, the minister, declared, will proceed "without any delay."

Indicating that "Canadian patience has been exhausted," Mr. Pearson said that as a first step Canada soon will request "and expect to receive" from the U.S. government the cooperation necessary under the boundary waters treaty. At this session of Parliament, the government will introduce legislation to provide for the construction and to set up a government agency to deal with the construction itself.

Before Canada can proceed, however, a number of agreements will have to be worked out with the provinces of Ontario and Quebec and the state of New York on the division of power and other matters arising from the construction.

The agency is expected to take the form of a Crown company responsible to Parliament.

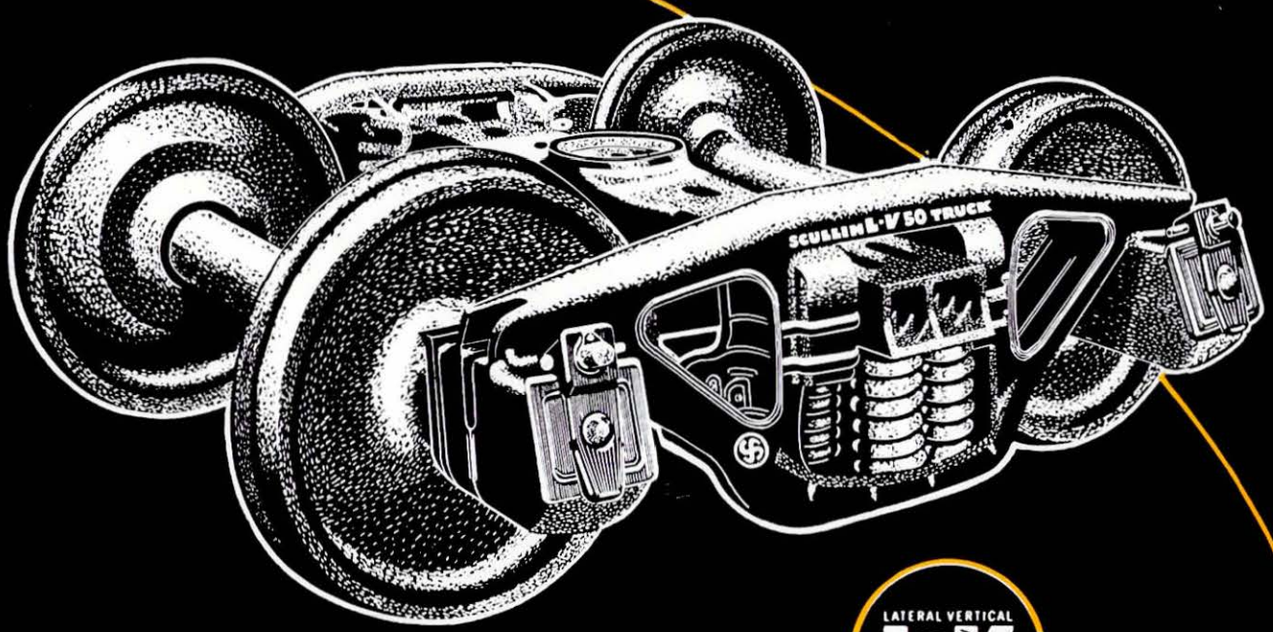
New Auto Rates Off Until November 26

The Interstate Commerce Commission has now set November 26 as the effective date of its outstanding order requiring an adjustment of railroad freight rates on new automobiles. The order had previously been scheduled to become effective November 5.

The postponement order noted that such action had been requested by the courts. (*Railway Age* of August 13, page 40.)

sidetrack your lading damage problems . . . give high-speed profits the right-of-way . . .

ORDER



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LATERAL VERTICAL CUSHIONED MOTION

THE SMOOTHEST TRAFFIC-BUILDERS BETWEEN LCL AND YOUR RAILS

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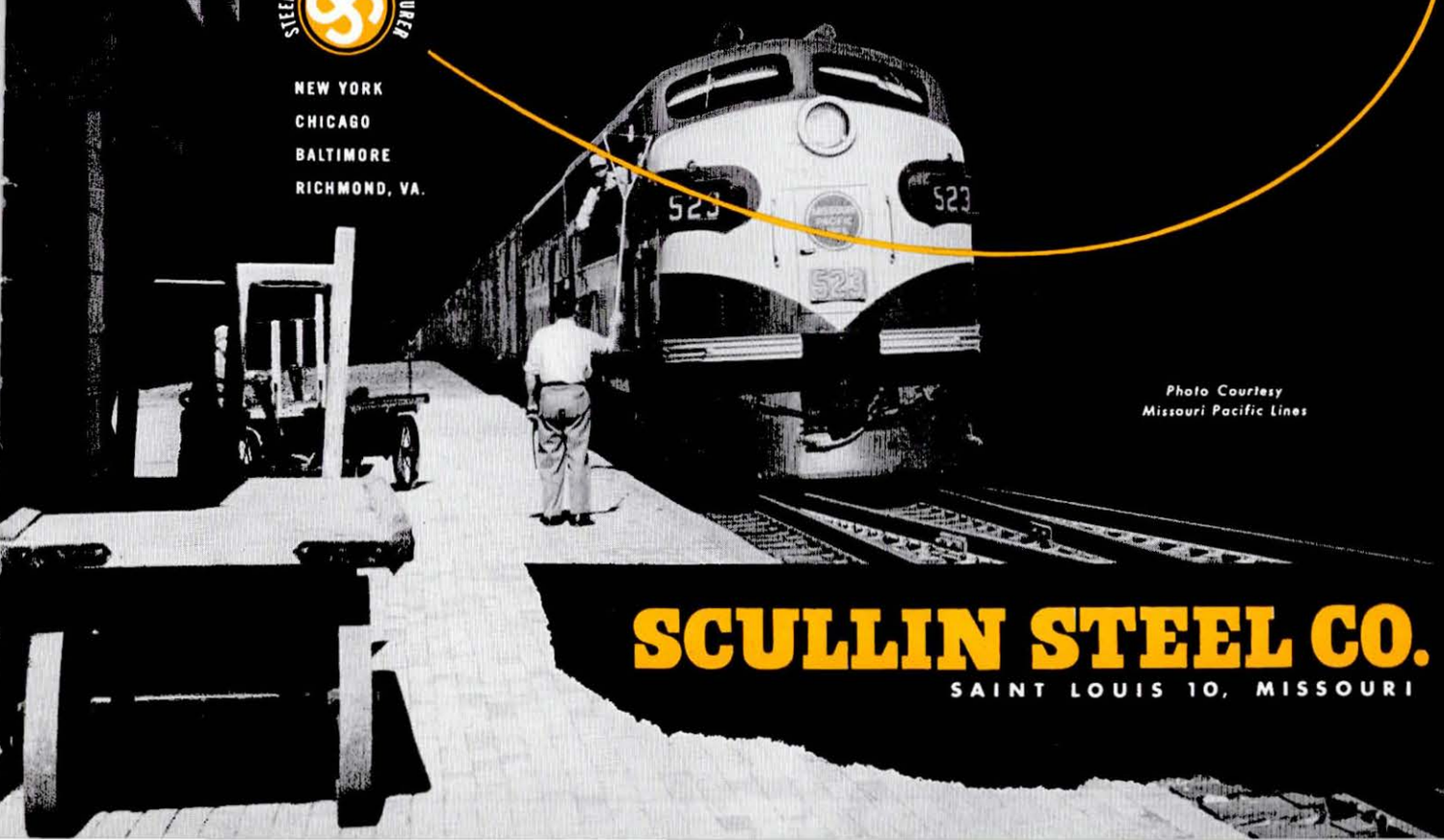
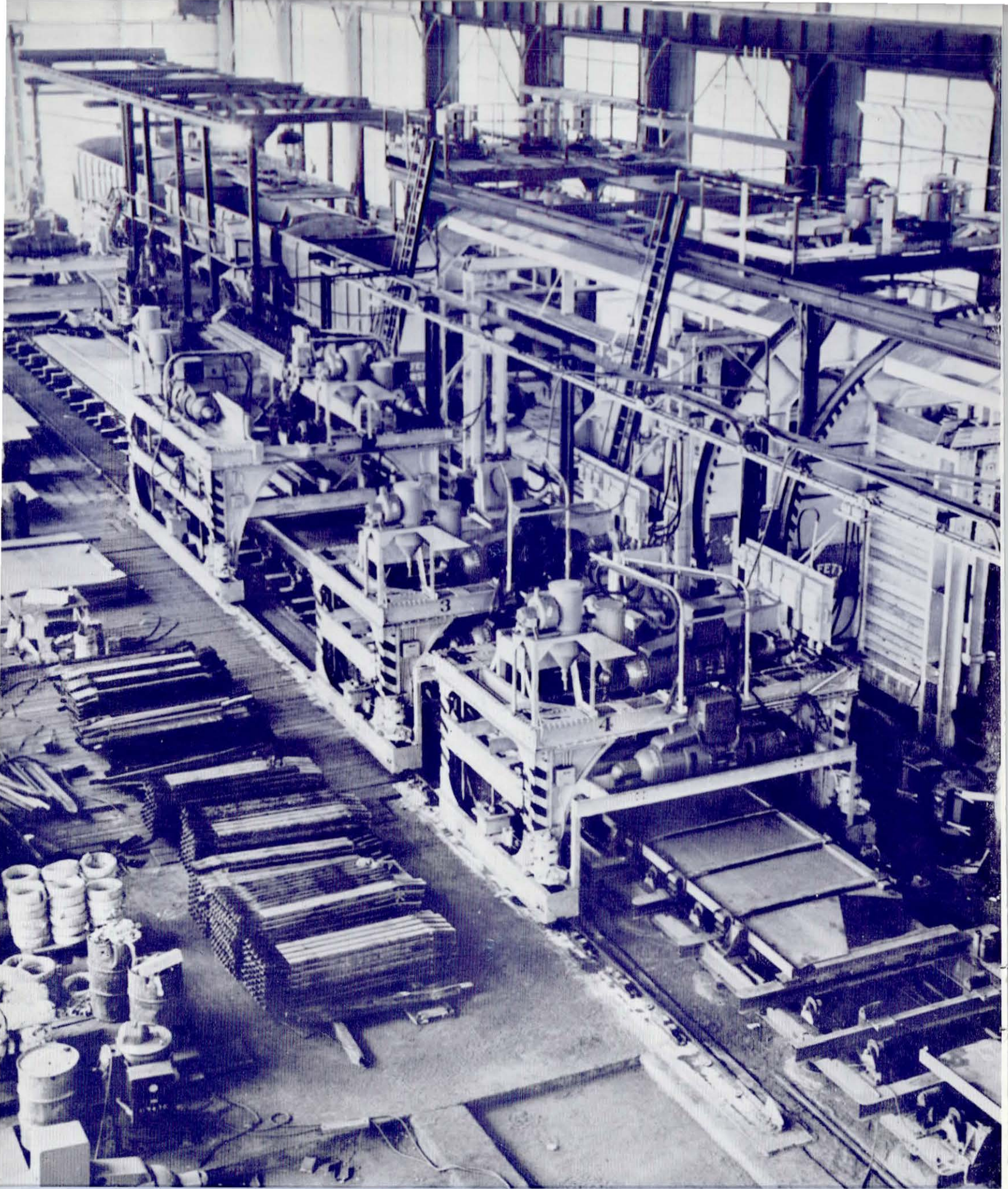
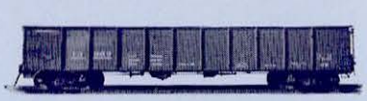


Photo Courtesy Missouri Pacific Lines

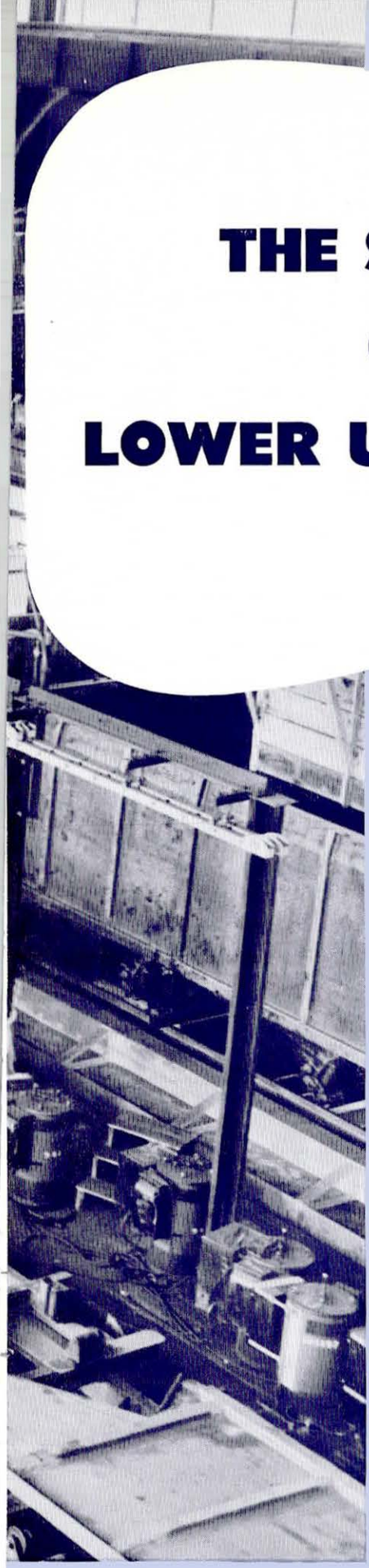
SCULLIN STEEL CO.

SAINT LOUIS 10, MISSOURI

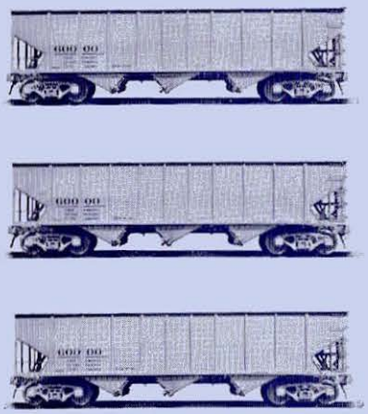




a.c.f.



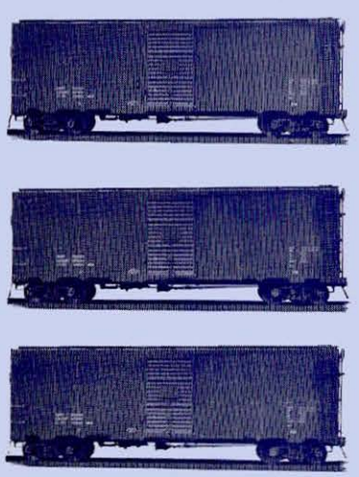
THE SECRET OF LOWER UNIT COSTS



In one word it's..."facilities." And if you consult Mr. Webster, you will find his definitions provide an apt description of ACF: "readiness from skill or use; dexterity." Or..."offering things that promote the ease of any operation."

To enlarge on Mr. Webster's concise meanings we submit the fact that ACF experience...engineering skill...and plant investment...represent "facilities" second to none in the complex business of building railroad cars.

No 'secrets' are exposed when we say that leading Railroads all over the world come to ACF for advice...for consultation...for the finest cars built. Consult an ACF representative on *your* car problems. Find out first hand why ACF Standardized Design freight cars offer lower unit costs and greater operating economy. American Car and Foundry Company, New York • Chicago • St. Louis • Cleveland Philadelphia • Washington • San Francisco.



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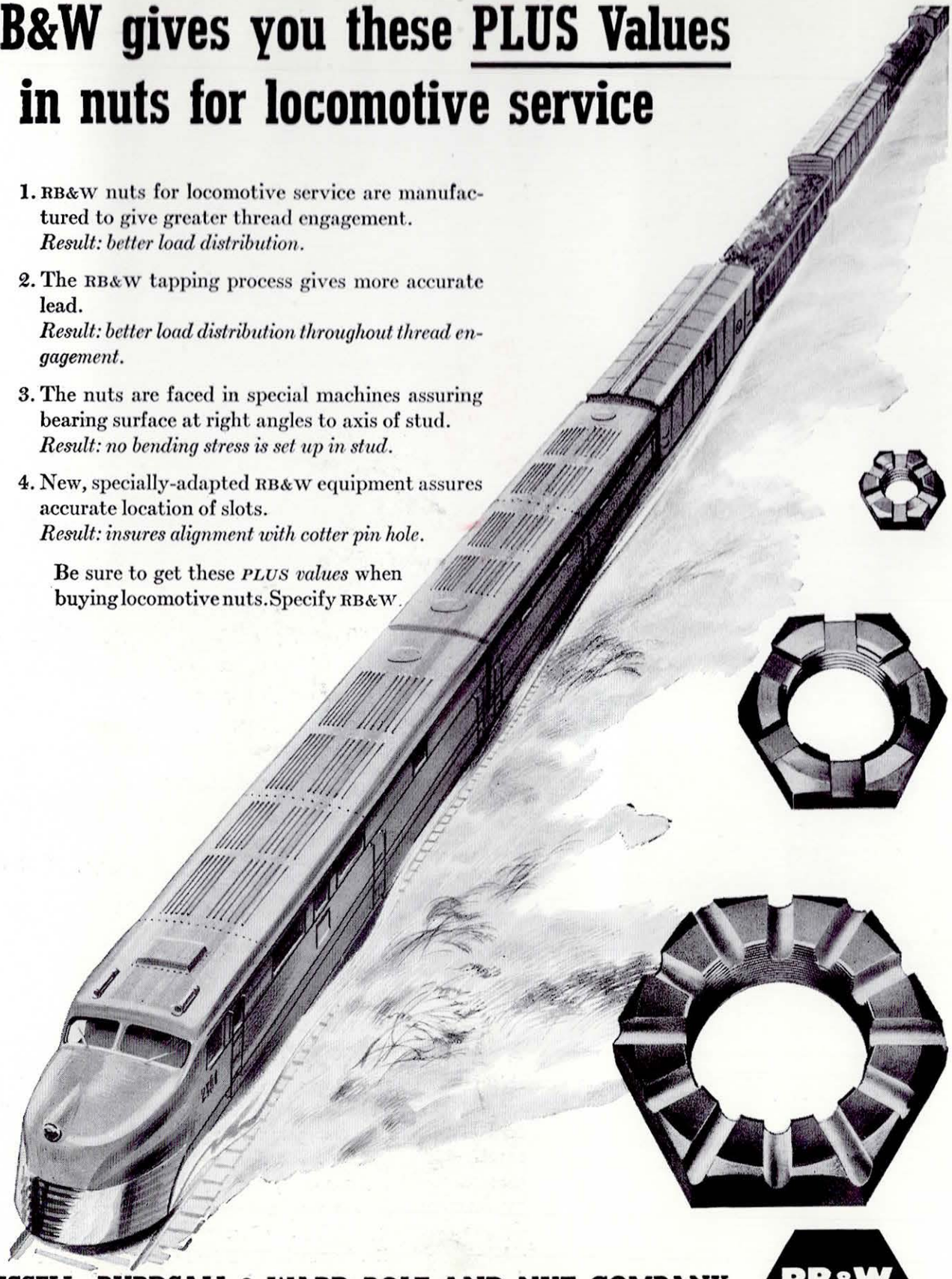
RB&W gives you these PLUS Values in nuts for locomotive service

1. RB&W nuts for locomotive service are manufactured to give greater thread engagement.
   Result: better load distribution.
2. The RB&W tapping process gives more accurate lead.
   Result: better load distribution throughout thread engagement.
3. The nuts are faced in special machines assuring bearing surface at right angles to axis of stud.
   Result: no bending stress is set up in stud.
4. New, specially-adapted RB&W equipment assures accurate location of slots.
   Result: insures alignment with cotter pin hole.

Be sure to get these *PLUS values* when buying locomotive nuts. Specify RB&W.



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106 YEARS MAKING STRONG THE THINGS THAT MAKE AMERICA STRONG

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INSTALL A.S.F. RIDE-CONTROL® PACKAGES

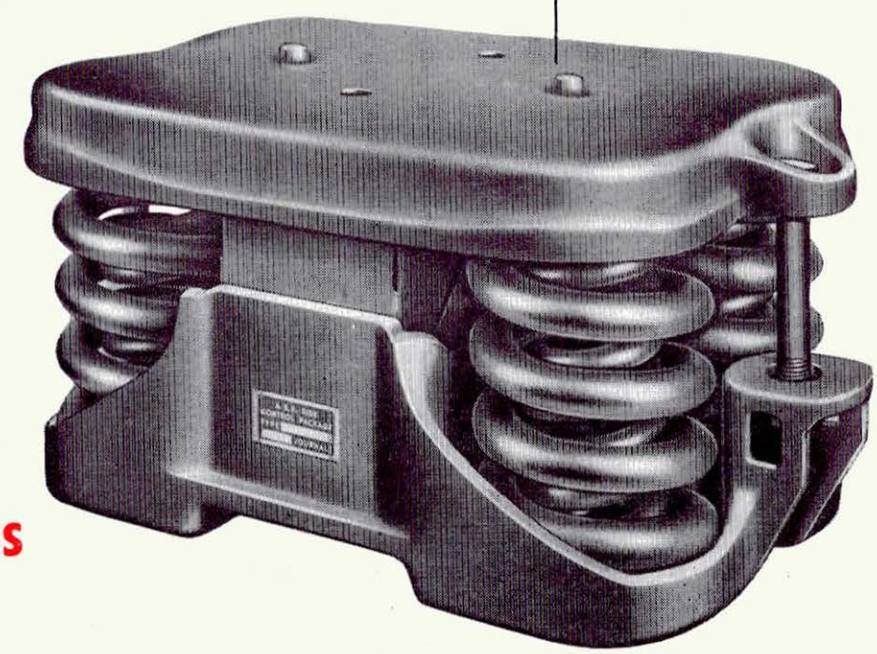
You can enjoy the advantages and savings of longer spring travel *now*, by installing the A.S.F. Ride-Control Package in your present rolling stock.

The Ride-Control Package is a complete spring group with built-in 3-way friction control (the famous A.S.F. Ride-Control principle). The unit comes completely assembled, is installed as a unit in place of the present spring group.

This Package gives 2½ to 3 inches of controlled spring travel, in place of the AAR-standard 1-9/16 to 1⅝ inches. Separate Ride-Control springs provide constant pressure on hardened friction surfaces to control movement in all three directions.

Cost is low—about $160 per car set—but it means big savings. Ride-Control helps protect lading and cut claims. It helps protect rolling stock and cut repair costs. It helps protect roadbed and cut track maintenance. You can't lose! And you can have it now!

Talk it over with your A.S.F. representative and ask him for all the details; or write American Steel Foundries, 400 North Michigan Ave., Chicago 11, Illinois.



AMERICAN STEEL FOUNDRIES

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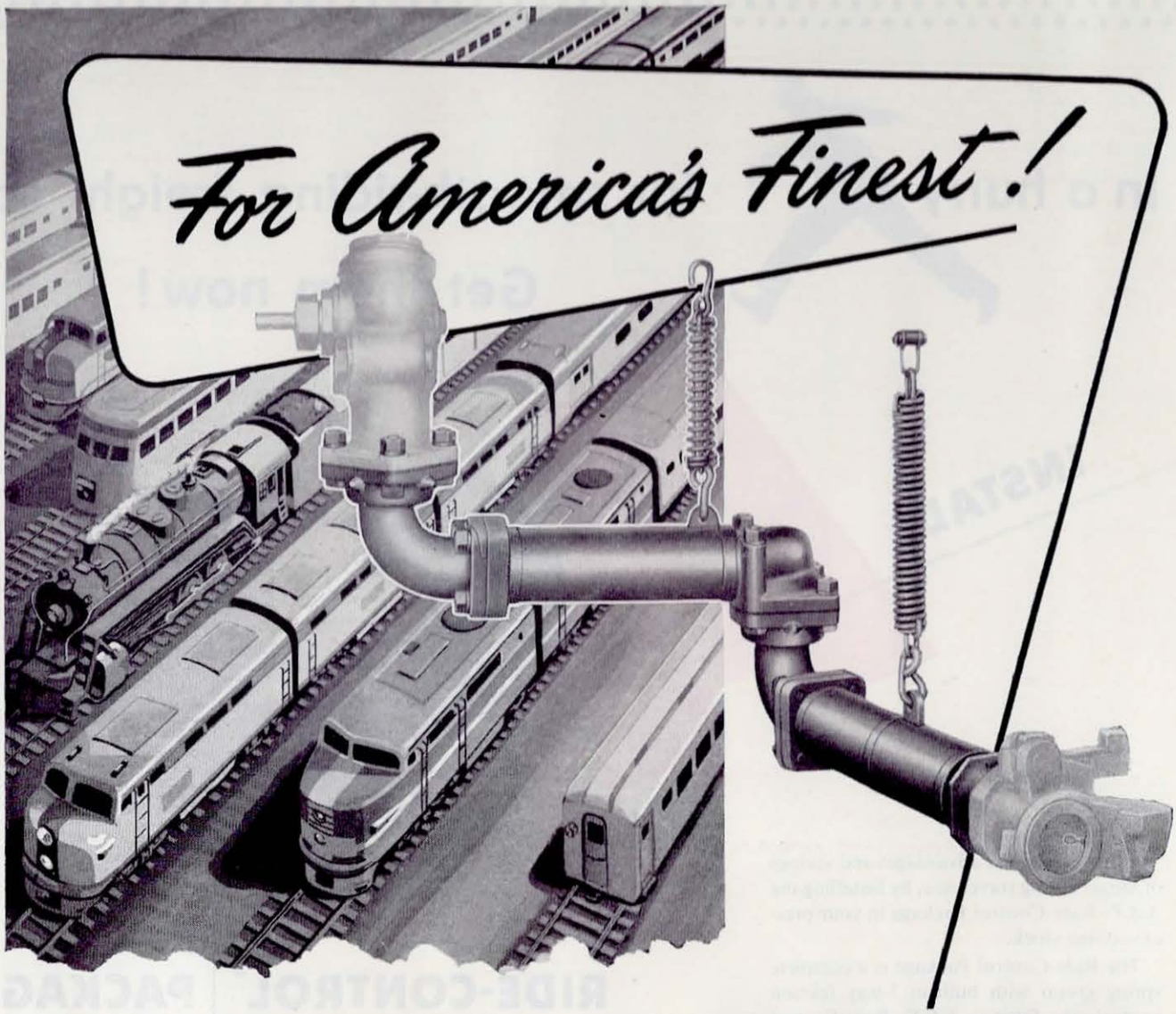

BARCO STEAM HEAT CONNECTIONS *for* PASSENGER CARS DIESEL and STEAM LOCOMOTIVES

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There are many good reasons for using Barco Steam Heat Connections: Light weight welded steel construction reduces weight approximately 30% and at same time provides greatly increased steam capacity. Specially hardened alloy steel wearing parts, fitted with exclusive Barco gaskets, insure long, trouble-free service. Barco Connections have 50% fewer wearing parts. Simple construction means less maintenance, fewer parts to stock, easy installation. For complete information, write BARCO MANUFACTURING CO., 1800L Winnemac Ave., Chicago 40, Ill. In Canada: The Holden Co., Ltd., Montreal, Canada.

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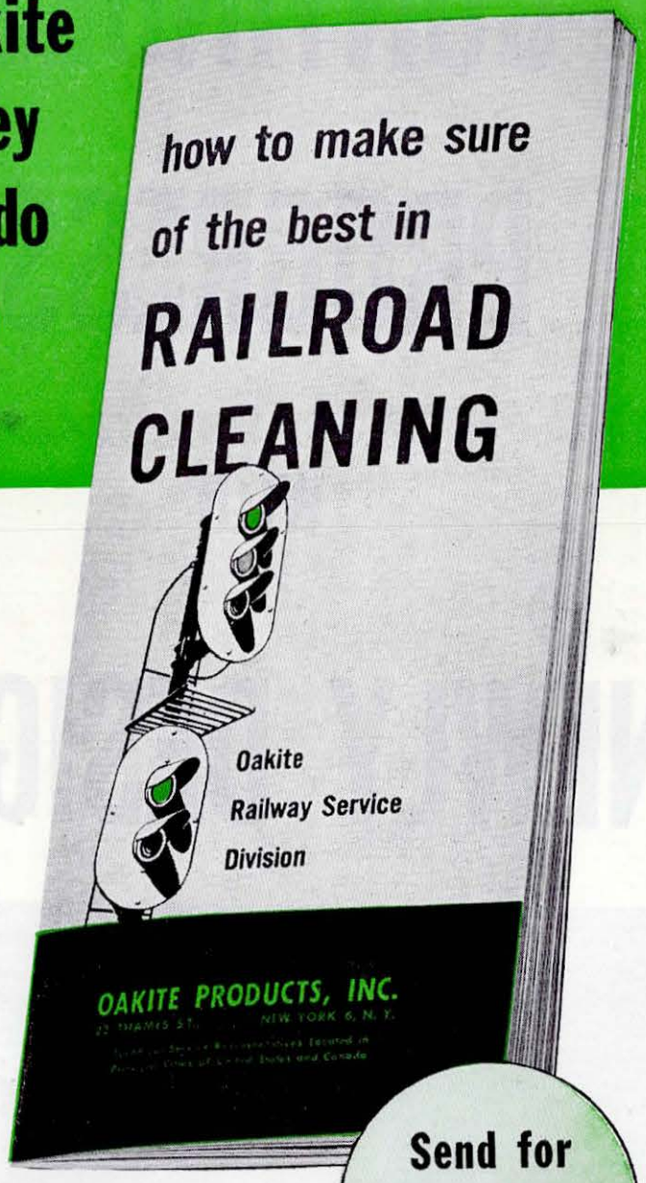
Just ONE IDEA lifted from this NEW 56 page Oakite booklet can save money for your road . . . help do some maintenance job easier, faster, better



Yes, this fact-filled booklet is yours, free for the asking. Between its covers you will find usable ideas, job-tested cleaning methods and short-cuts on a wide range of maintenance, overhaul and repair. Here are the answers to new and different ways to easier, faster maintenance on steam and Diesel power. Plus a lot of helpful data on mechanical and manual methods and materials on car washing.

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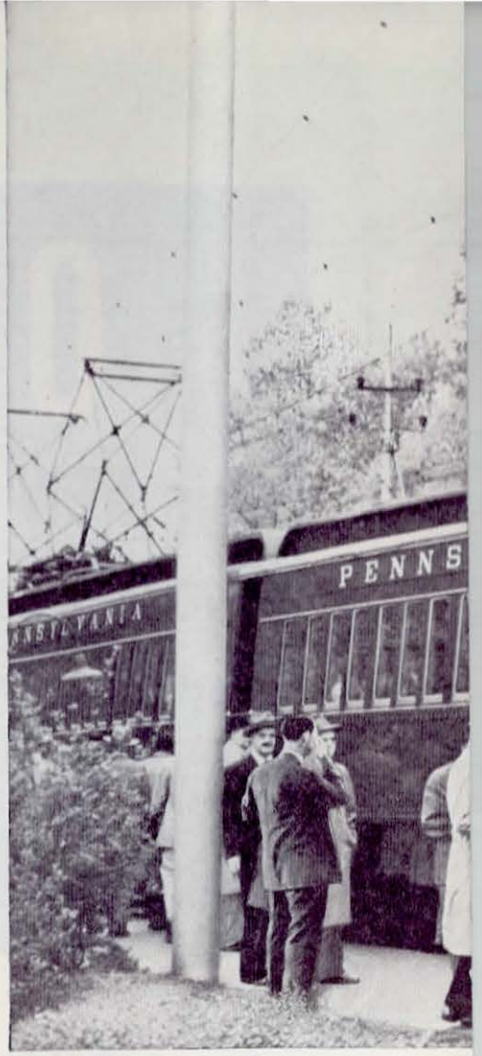
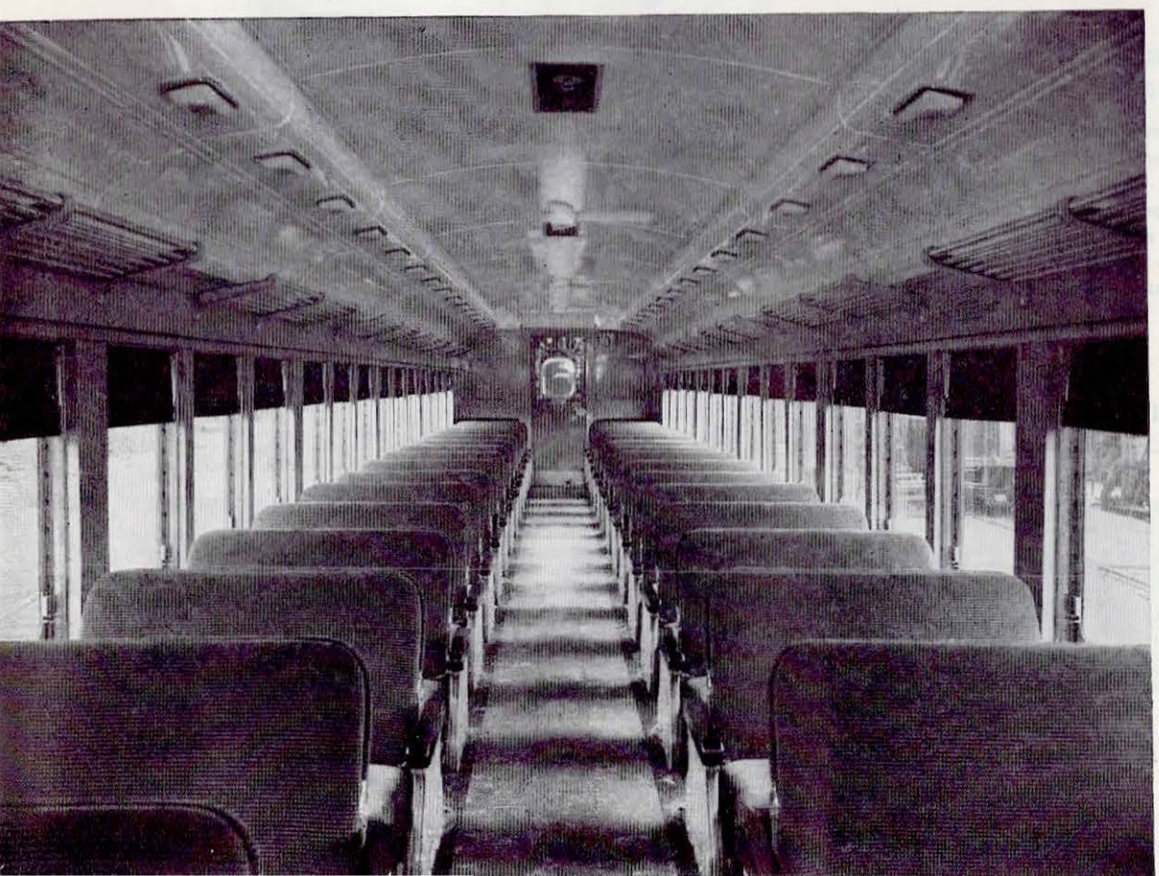
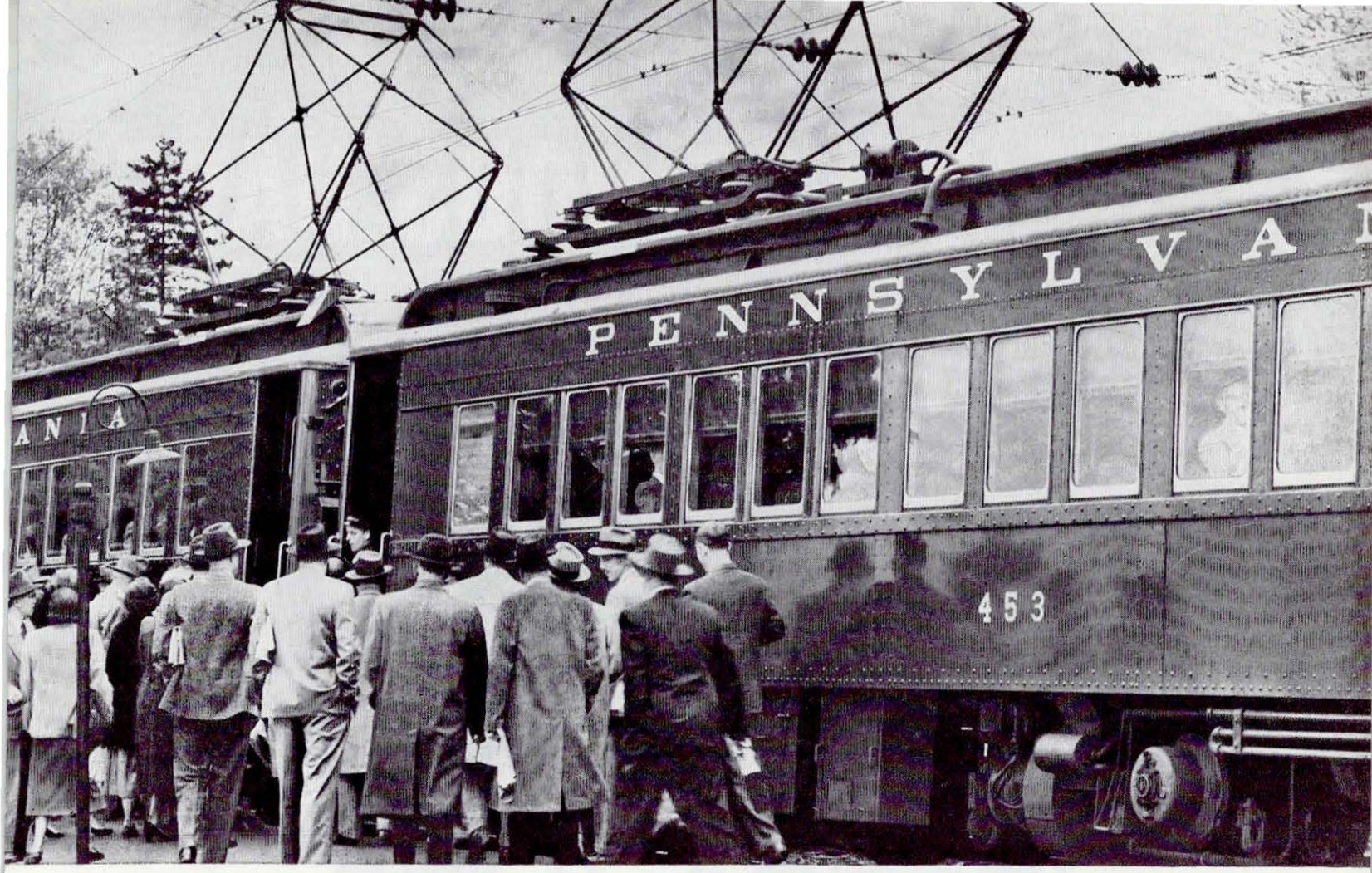
For additional information, use postcard on pages 63, 64

PENNSYLVANIA CONTINUES PROGRESS with NEWLY DESIGNED 4-MOTOR





Pleasant interior color scheme combines red or blue upholstery with sides of pastel gray with red trim and ceilings in eggshell white. Asphalt tile is used for floor covering. Roofs, sides, and floors are insulated for greater comfort in both summer and winter.



By adding the 50 newly designed cars, the Pennsylvania has increased its over-all daily commuting capacity by 14,400 seats.

COMMUTER CARS

50 completely rebuilt cars used for service in the electrified Eastern commuter zone include modern G-E equipment that incorporates latest advances in design of a-c motor and control apparatus. Result is more comfortable transportation for growing commuter traffic.

RAILROAD ELECTRIFICATION SYSTEMS

With large numbers of city dwellers moving to the more spacious suburbs in recent years, railroads have had an increasing problem to handle traffic that is crowding the commuter passenger-mile record of 1926. Among the roads that are providing for this increase—and for even more business in the future—is the Pennsylvania, which has recently completed the rebuilding of 50 commuter cars.

Staunch believer in railroad electrification where it is justified by the volume of traffic, the Pennsylvania management is convinced that MU cars are most efficient for heavy commuter service. Further experience and various studies show that all-motor-car trains are preferable to motor-trailer combinations, and the ideal is for *each axle to be powered.*

The Pennsylvania's newly designed 4-motor cars operate on 11,000-volt, 25-cycle, single-phase a-c. They have a top speed of 70 mph and meet the tough requirements of modern commuter service—fast schedules and frequent stops. By selecting G-E motors and control, the Pennsylvania is capitalizing on the latest advances in design of a-c apparatus. Ask your G-E representative for the full story of the benefits of electrification for commuter service through the use of modern G-E distribution and traction equipment, or write to *General Electric Company, Schenectady 5, N. Y.*

GENERAL ELECTRIC

123-1

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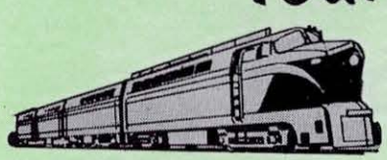
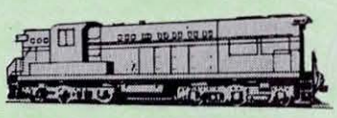
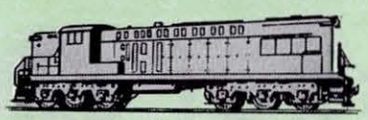
"You're GETTING something more



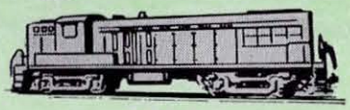
6400-HP. Road Locomotive
Four 1600-HP. Units



1600-HP. All-service Locomotive
Six Traction Motors



1600-HP. All-service Locomotive
Four Traction Motors



1600-HP.
All-service Locomotive

IMPORTANT FAMILY CONNECTIONS

The extra horsepower that you get in Baldwin-Westinghouse Diesel-Electric Locomotives is a dividend that comes from doing a lot of *little* things *unusually well.*

Even such pioneer performers as Baldwin Connecting Rods, which have already won an impressive service reputation, have been improved.

They are heavier in cross section for extra strength. Machining pads permit accurate mating within the range of a few ounces, assuring complete interchangeability. Elimination of thrust flanges on bearings simplifies installation. All this contributes to higher output, a smoother flow of power to the wheels, and gives you another reason why Baldwin-Westinghouse Locomotives bring you an all-important *extra* margin of performance.

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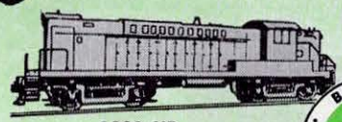
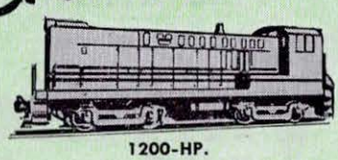
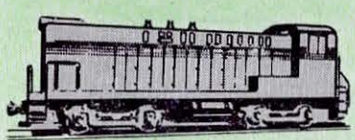
because we're DOING something more"



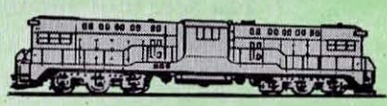
1200-HP.
Road Switching Locomotive



1200-HP.
Switching Locomotive



800-HP.
Switching Locomotive



2400-HP. Road
Transfer Locomotive

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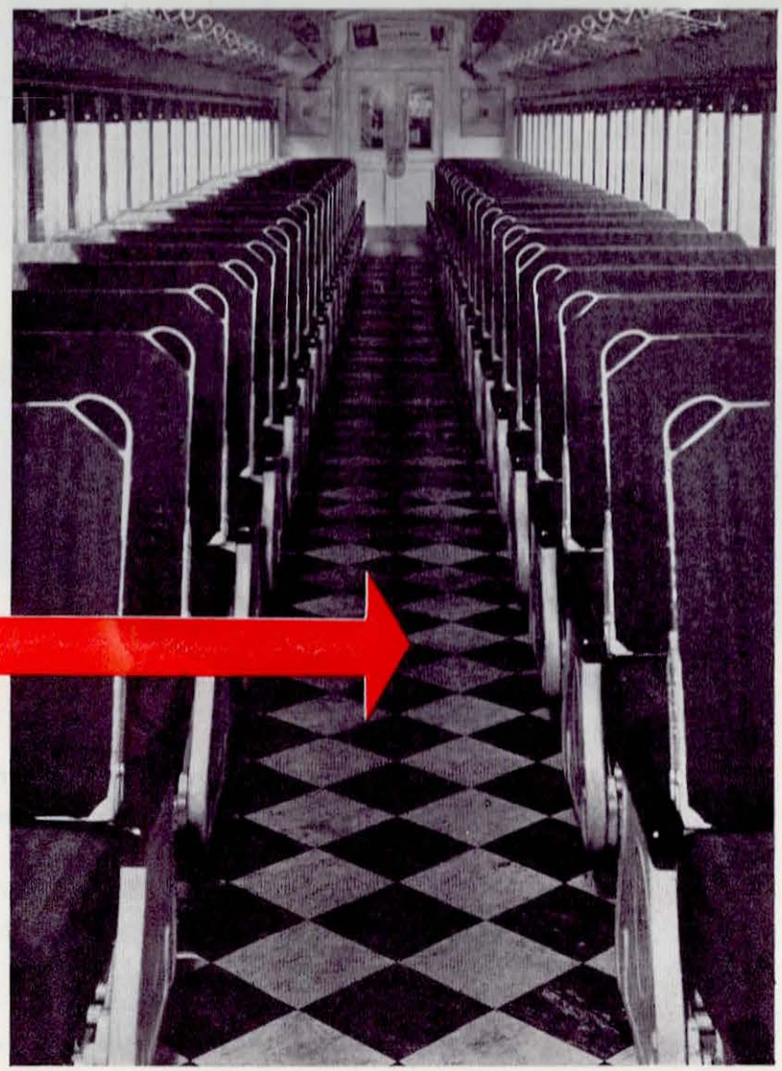
DIESEL-ELECTRIC LOCOMOTIVES

Put your car floors on the right track!



STRAIGHT UP the aisle to lower maintenance costs, longer service life, eye-appealing beauty! That's the course the Chicago and North Western Railway Co. chose when it installed "Terraflex" flooring made of VINYLITE Brand Resins in its suburban cars.

Meeting the challenge of thousands of scuffing feet—often tracking cinders, gravel, rock salt and mud—month after month, this tough, resilient flooring is providing the answer to many railroads' passenger-car floor problems.

You see, resilient tile and continuous floorings made of VINYLITE Resins are unaffected by strong cleaning compounds. They are highly resistant to water, salt, greases, oils, alkalies, and most strong acids.

They resist fire, cigarette burns, scratches. Their flexibility prevents lifting due to working of car floors. They require no waxing, either for surface protection or luster. They come in a wide range of colors, clearer, brighter, more stable than ever before obtained in a resilient flooring.

You'll be well rewarded if you equip your passenger cars with flooring made of VINYLITE Resins. We'll gladly give you the complete story. Write Dept. JV-73.

Data on "Terraflex" courtesy Johns-Manville Corp., 22 East 40th Street, New York 16, N.Y.

Vinylite BRAND RESINS

BAKELITE DIVISION UCC

BAKELITE COMPANY, *a division of Union Carbide and Carbon Corporation, 30 East 42nd Street, New York 17, N. Y.*

HOW "PUBLIC RELATIONS" SHOULD BE ORGANIZED

The naming by one of the nation's largest railroads of an officer of vice-presidential rank with full-time duties exclusively in the field of public relations has raised the question of how long it has taken this important function to attain this status of recognition. Two of the best known and most experienced historians in railroad employ, Robert S. Henry and Carlton J. Corliss of the Association of American Railroads, remind us that more than 42 years ago this paper (the January 29, 1909, issue of the *Railroad Age-Gazette*) made the following editorial suggestion:

"Suppose . . . that a great railway should appoint a vice-president in charge of public relations; a man of mature years and judgment, skilled in railway affairs and human affairs as well, and carrying enough weight in the councils of his company so that his suggestions would be apt to be carried out. Suppose he were to devote his entire time to a first-hand study of local conditions in every community directly served by the railway, with a view to heading off causes of unpopularity as fast as they might appear, and to discovering, from a point of view a little less obscured by official duties than that of the president or the general manager, the kind of service which the railway was really giving its patrons, and the way in which that service could be performed better and existing friction removed. Such a man would be neither a traffic officer, a legal officer nor an operating officer, but would be in some measure a combination of the three in his active work. Would not such a vice-president earn his pay? We believe that he would, and we shall welcome comment and discussion on this subject from our readers."

As far as we have been able to discover, the foregoing is the first use of the expression "public relations" in the present generally accepted connotation of the term. The editorial compared the operating department of a railroad with a nation's army and likened the "public relations" function to that of the diplomatic corps of a government. It said that "the tendency of armies is to get governments into trouble and that the function of diplomatic corps is to prevent them from doing so. The railway principality provides itself with the army but neglects the diplomatic corps."

It was conceded, to be sure, that "the railway principality does a good deal of diplomatic adjusting in an informal way"—and went on to record the activity of the late W. J. Harahan when he was assistant manager of the Illinois Central: how he listened for "popular murmurings or rumblings" as he went over the road, and took steps "to stop complaints by removing the cause of them." Such efforts, however, were not considered sufficiently widespread to solve the industry's problem in this sector, so the editorial suggested the naming of a high-ranking officer with this specific function.

In the same issue of the *Railroad Age-Gazette* was published a letter from W. J. Harahan, who was then assistant to president of the Erie at New York, in which, in general, he supported the *Gazette's* proposal, but he insisted that, even where a specialist is employed to direct "public relations," the whole organization should be schooled in this practice; and he particularly recommended that "those men likely to be made officers" should receive this kind of training "from their earliest start in the railway business, so that this will become a prominent feature in their mind."

In the opinion of our colleague, Samuel O. Dunn, the proposal for formal recognition of the "public relations" function was the handiwork of Ray Morris, at that time managing editor of the *Railroad Age-Gazette*, and since

1920 a member of the banking firm of Brown Bros., Harriman & Co. We questioned Mr. Morris and he believes he "probably" wrote the piece, but does not want to be too positive, after the lapse of so many years. Be that as it may, the suggestion itself, plus the comment by Mr. Harahan, prophetically summarizes all the real meat in the millions of words which have been uttered on the subject since "public relations" became a recognized professional activity.

Performance in public relations is the job of every officer and employee on the railroad payroll—but it involves specialized techniques which few officers and employees will master or even attend to consistently, without some systematized encouragement and assistance from specialists. And such encouragement and assistance must begin at the very top of the organization—because the top of the organization requires this kind of skilled counsel as much as any employee in the ranks. Indeed, the function should operate at the top *first*, because the lower echelons invariably take their cue in behavior from the ranks above them. All of the people in an organization perform functions in public relations—as they operate light switches and telephones—but the installation and supervision of the electrical devices in general use, nevertheless, require the services of authoritative experts; and, for exactly the same reason, the mechanics of public relations requires specialized and authoritative direction from the very top of the organization.

THE "UNION SHOP"

In governmental, academic, and even some business circles in the decade prior to the recent war it became the "style" or "intellectual climate"—or whatever other euphemism may be preferred—to be a little "pink" or even "red." Many well intentioned people allowed themselves to drift away over to the "left," or at least to tolerate that drift, because they had no profound convictions one way or the other and were content to take their standards of political morality from their neighbors. It is easy to understand and even sympathize with such people, but pretty hard to undo the damage done by their unthinking tolerance of an inherently evil philosophy or "ideology."

Isn't a parallel "intellectual climate" now operating to seduce employers into acceptance of the so-called "union shop"? As reported in this space in our August 20 issue, page 33, Donald Richberg has written an analysis of this device which utterly destroys any intellectual or moral respectability which might be claimed for it. He reveals it in its true guise as a device for enslaving the American workingman. Can there be any excuse for a responsible employer of labor who gives in to a "union shop" demand, without taking the trouble to inform himself fully on the subject? It may well be that superior force will compel the railroads in whole or in part to yield to this exposure of their employees to tyrannical dictatorship. But can there be any justification for conceding this innovation without a last-ditch fight—including an appeal to individual employees, with an explanation to them of what the long-run implications of this project are for their welfare?

FEWER SLEEPERS—MORE SERVICE

Nearly everybody in the railroad industry is talking about the problem posed by the passenger deficit, whether calculated by "the I.C.C. formula" or otherwise. There are, of course, two obvious ways to alleviate the burden: (1) reduce expenses by eliminating "hopeless" services, and (2) increase the earnings of the service which is being provided.

One possible move which appears not to have received an appropriate degree of consideration is that of extensive "pooling" of sleeping car lines. This would, simultaneously, reduce operating costs and increase revenues on remaining services. The general idea is not dissimilar to one understood to be now under study by the eastern roads to favor superior freight routes on competitive runs, and discontinue routings via inferior, or circuitous, routes.

The opportunities in this direction are numerous. The reason they have not been taken advantage of probably is that, up to now, competition between individual roads has generally been a stronger motive than desire for economy. It is only the completely changed conditions under which the railways do business which makes feasible today a suggestion which might have been undesirable in the past.

Many cases exist where two roads compete on two or more different runs—so that neither would lose if each surrendered one of the competitive services, while each would gain from the savings of the service eliminated. While there might be a matter of policy or pride involved in continuing some lines, it appears that the *overall* picture could be much improved by pooling, resulting (1) in reduced sleeping car mileage (with no loss in any specific intercity service), (2) increased occupancy of remaining car lines, and (3) reduced car-miles, switching, terminal and servicing expenses, and, in some cases, even train-miles.

There are a number of factors *pro* and *con*. Intermediate points, for instance, stand to suffer, but the question arises as to what extent the railroads can any longer provide service for a handful of passengers, particularly since the automobile now makes it relatively easy to reach points nearby where the remaining service is operating. An important *pro* is the necessity for viewing the situation in the light of the real competition, which is primarily that of other forms of transportation rather than that of other railroads.

Three of the locomotives coupled together for a multiple-unit test

Diesel Locomotives for the Argentine

By W. S. SHARP
Transportation Engineering
Westinghouse Electric Corporation
East Pittsburgh, Pa.

In 1947 the Argentine State Railways ordered 75 meter-gage locomotives from the Whitcomb Locomotive Company as part of an extensive dieselization program. Excellent records are being made by these locomotives, which were placed in service in 1949-1950 on the Ferrocarril Nacional General Belgrano. This is the principal meter gage line of the Argentine Government railways. This railroad serves many large cities and provinces of Argentine, the most important of which are Buenos Aires, Rosario, Santa Fe, Cordoba, Tucuman, Salta, Jujuy, Mendoza, San Juan, Resintencia and Formosa.

The locomotives were shipped completely assembled from the Whitcomb plant at Rochelle, Ill., to Buenos Aires. The first locomotives were installed in July 1949 and the last ones in April 1950. Seven to eight locomotives entered service each month during this period. These were the first diesel-electric locomotives used on the General Belgrano railroad.

The locomotives are used in passenger and freight service. Ten single units are used in the suburban service between Buenos Aires, Boulogue sur Mer, and Del Viso, 25 miles. The trailing load on these trains is approximately 200 tons, and they are made up of five passenger coaches and one postal car. This is a very intensive service, and the trains arrive at and leave the Buenos Aires terminal in intervals of 20 minutes. With the installation of these locomotives, steam power has been completely eliminated.

Other units are operated double under multiple-unit control to obtain 1,350 hp. and haul fast passenger trains of 18 to 20 sleepers of approximately 750 tons between Buenos Aires and Cordoba, a distance of 440 miles.

Some other units operate between Buenos Aires, Rosario and Santa Fe, hauling passenger, freight, and mixed trains. Speeds are limited by track conditions, but 46 m.p.h. is generally maintained. Freight trains of 1,000 tons trailing have been hauled by single 675-hp. Whitcomb locomotives between Rosario and Buenos Aires.

The locomotive power plant, in general, consists of the Superior 40-L-X-8 diesel engine direct-connected to the Westinghouse type 198-A generator. The diesel is an 8-cylinder in-line engine. It is nominally rated 900 hp. at 1,100 r.p.m. However, in order to meet the limits established by the Argentine State Railways, it was derated to 675 hp. gross at 1,100 r.p.m.

The engine is protected by a safety device that shuts the engine down whenever the lubricating oil pressure in the main header or in the turbocharger feed lines drops below the safe limit.

In case of excessively high water temperatures, the engine speed is automatically reduced to idling speed until the cooling water temperature decreases to normal. In addition to this, the driver is warned by colored lights and buzzers whenever the lubricating oil pressure or water temperature in any of the engines operated under multiple-unit control are not within the safe limits.

The generator is of the conventional Westinghouse diesel-electric, separately excited type. Its continuous rating at 1,100 r.p.m. is 1,300 amp., 315 volts. This corresponds to a net input of 600 hp. to the generator. The additional 75 hp. of engine rating is used for the auxiliaries.

The shunt field of the generator is separately excited from the YG-49-A exciter-auxiliary generator mounted on top of the main generator. The exciter-auxiliary generator is driven by V-belts from a sheave mounted on the main generator shaft extension. The main generator is equipped with a series starting winding that permits it to be used for cranking the engine by storage battery power. The generator has one self-aligning, free-fitting spherical roller bearing at the outboard end.

The auxiliary generator end of the exciter-auxiliary generator provides power at 75 volts d.c. for the locomotive lights, control, fuel pump motor, and battery charger. This machine is under the control of a voltage regulator and reverse current relay.

Engine load control is provided by the Westinghouse

LOCOMOTIVE DATA

Major Dimensions

Track gage	1 meter (39⅜ in.)
Height over roof	12 ft. 7⅝ in.
Overall height	13 ft. 1¾ in.
Width over cab sheet	9 ft. 6 in.
Overall width	10 ft. 2 in.
Truck wheel base	11 ft. 3½ in.
Total wheel base	32 ft. ½ in.

Engine

Superior 40-L-X-8, 8½ in. x 10½ in. 675 gross hp. at 1,100 R.P.M.

Westinghouse Electrical Equipment

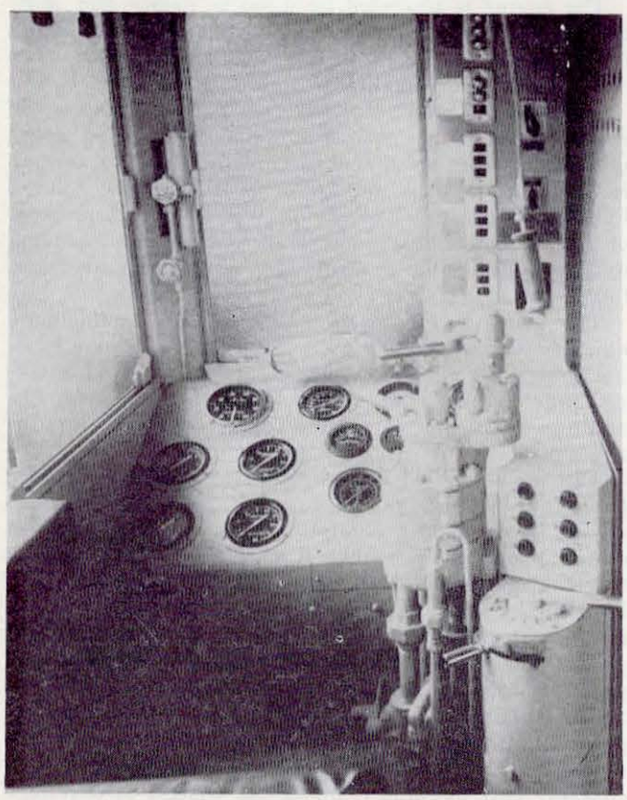
Main generator	One type 198-A
Exciter-auxiliary generator	One type YG-49-A
Radiator fan motor	One type Y-44-A
Radiator fan generator	One type YG-36
Traction motors	Six type 928-GK
Gear ratio	13:72
Drivingwheel diameter	40 in.

Tractive Force and Speed

Starting tractive force (at 25% adhesion)	41,500 lb.
Continuous tractive force	17,500 lb.
Speed at continuous tractive force	10.5 m.p.h.
Maximum speed	57 m.p.h.
Locomotive weight (fully loaded)	166,000 lb.

"Autoload" control system in conjunction with the Woodward UG-8 governor and the differential series exciter. The load-control carbon pile rheostat is connected in series with the battery and the 4-pole separately excited field of the exciter. The system functions to adjust the field currents so that the main generator does not overload the engine, and so that it always maintains the speed corresponding to the engine governor setting.

Six Westinghouse type 928-GK traction motors are used. Three motors are mounted on each of two swivel trucks. These motors are series-type, axle-hung and are force ventilated. They drive the axles through single reduction gearing. The blower for ventilating the traction motors is driven from a stub shaft attached to the shaft extension of the main generator. The branch duct to each traction motor is supplied with a blocking plate which is adjusted so that each motor receives approximately equal amounts of air.



The operator's control station, showing controller, brake stand, gage panel and light-switch panel

The radiator fan is of the axial flow type and is carried on the shaft of the radiator fan motor. The fan is manufactured by the Sturtevant Division of Westinghouse Electric Corporation. The motor is mounted with the shaft vertical at the front of the hood. The cold air is drawn in through the oil and water radiators on both sides of the hood, and the warm air is exhausted through the roof. Air vent shutters are provided for each bank of radiators in the walls of the hood. These shutters are thermostatically controlled to throttle the air to the radiators during the times when no cooling is required.

The radiator fan motor is powered by the radiator fan generator. The fan generator is belt-driven from a shaft extension at the front of the engine. This generator has a shunt field winding that is excited in two steps from the battery. These steps are controlled by engine water thermostats. The fan speed is dependent upon engine speed and engine water temperature. The capacity of the system will allow full load operation of the engine at ambient temperatures up to 113 deg. F.

The air compressors, traction motor blower, and oil and water circulating pumps are mechanically driven. The fuel transfer pump is driven by a Westinghouse type FK, ¼-hp., 1,725 r.p.m., 75-volt d.c. motor.

Control

The locomotives are equipped with single station, multiple-unit control. The operator's control station is on the left hand side of the cab. At this station are grouped the controller, independent and automatic brake valves, instrument panel, foot sander switch, engine starting and stopping pushbuttons, air-horn pull cord, window-wiper controls, and various light switches.

The engine speed setting of the Woodward UG-8 governor is controlled by an electropneumatic throttle operator. The controller throttle handle has an "Off" position and seven running notches. The engine runs at the idling speed of 450 r.p.m. on the first notch and at 1,100 r.p.m. on the last notch. The first notch is a "soft start" notch. Reduced excitation is applied to the exciter, resulting in very soft starting of the locomotive. The reverse handle of the controller has four notches: *Off*, *Engine Only*, *Forward* and *Reverse*. The engine can be started only when the reverse handle is in the *Engine Only* position. The engine may be run at any speed on this notch with the locomotive at stand-still in order to pump air. Special multiple-unit control is provided that allows up to three units in multiple with the operator in either end unit being able to stop or start any engine on any unit without interfering with the engines on the other units.

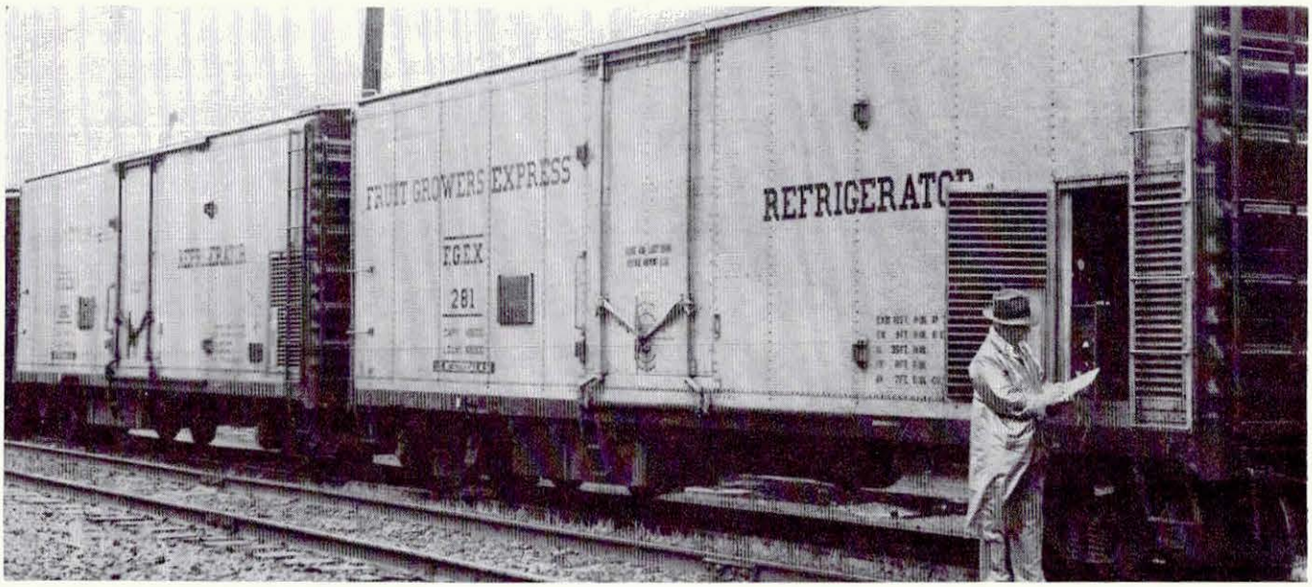
The traction motor connections employ both transition and field shunting. At starting, the six motors are connected in three parallel groups of two in series, full field. At about 12.5 m.p.h. the motor fields are shunted. At about 19 m.p.h. transition occurs, and the motors are reconnected to be all in parallel, but in full field. At about 38 m.p.h. the motor fields are again shunted. By the use of these connections, the traction motors absorb full engine horsepower over the entire speed range of the locomotive. Maximum performance for the locomotive horsepower available is thus obtained. The transition and field shunting connections are controlled automatically for both increasing and decreasing speeds by two voltage relays.

Motor cutout protection is provided for emergency

operation. Any pair of motors may be cut out, and the other four will be automatically connected in parallel.

Wheel slip protection is provided when the traction motors are connected series-parallel. At the speeds and tractive forces available under this condition, the possibility of wheel slip is greatest. Three slip relays are provided, one for each pair of traction motors. The relay coils are connected in bridge circuits and detect slippage when the voltage of the slipping motor rises and unbalances the bridge.

When the slip relays are energized, they energize a slip unloading valve which releases air from the pneumatic throttle operator, causing the governor to reduce engine speed to idle. A buzzer and light indicate when the wheels slip. When operating locomotives in multiple, the slipping of wheels of any unit will reduce engine speed on only that unit, but the lights and buzzers will indicate on all units. When the wheels stop slipping, the relays drop out, the buzzer and lights cease indication, and the engine speed returns to its former setting.



The refrigerating units in the F.G.E.X. mechanically cooled refrigerator cars can be stopped and started without entering them. Interior temperature can be read on dial thermometers on the side of the car

Economy in Operation with

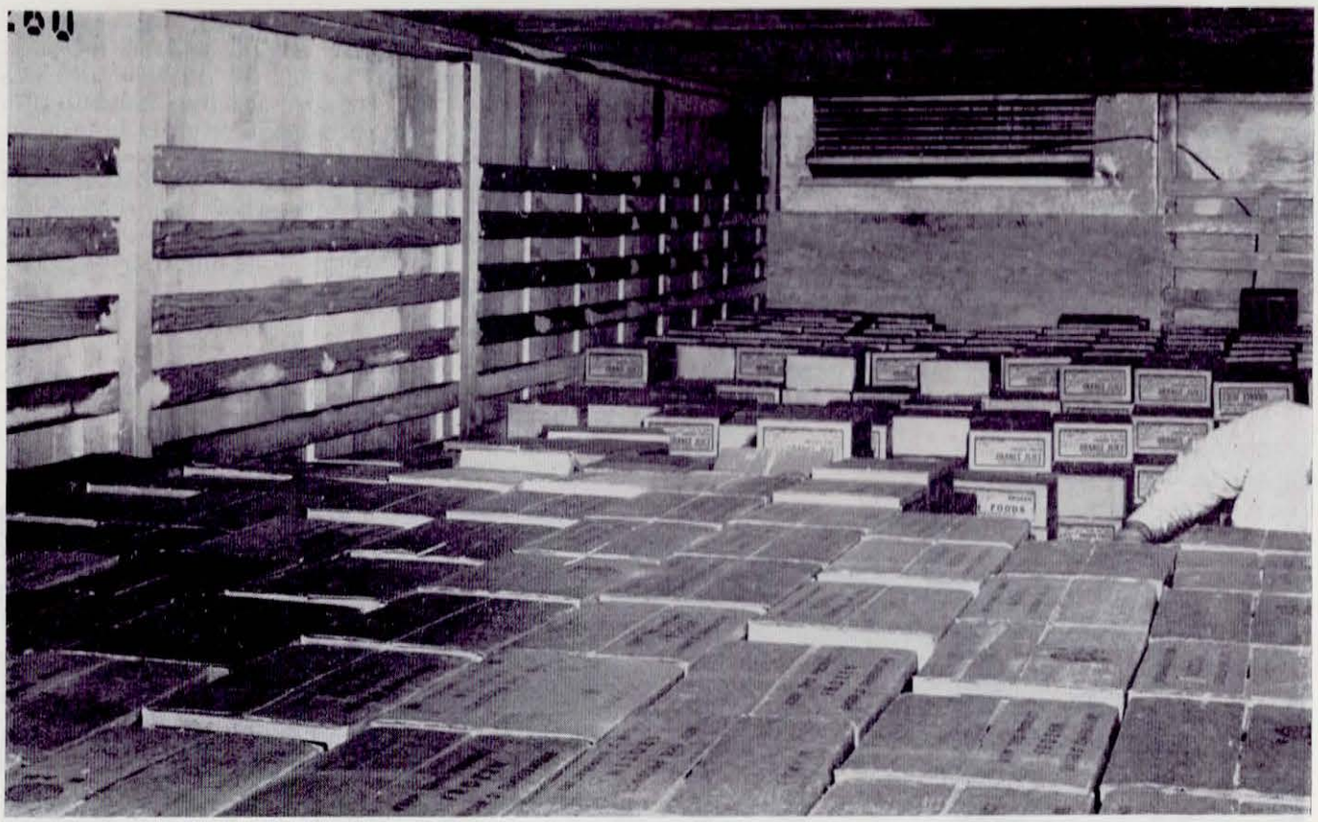
Mechanically Cooled Refrigerator Cars

F.G.E.X. soon will have 154 cars with General Motors diesel-driven equipment for handling quick-frozen food shipments

The Fruit Growers Express Company is now installing mechanical cooling equipment supplied by the Frigidaire, Detroit Diesel Engine and Delco Products Divisions of General Motors in 154 refrigerator cars which will be used primarily for shipping quick-frozen foods.

The new mechanically refrigerated cars are expected to offer many primary advantages including about 90 per cent less refrigerating cost while in transit, considerably fewer car overhauls and an estimated extension of 10 to 12 years of useful life. Other advantages claimed are greater efficiency in keeping out heat, automatically controlled constant temperatures, and a considerable increase of usable space in the car.

Because of the rapid increase in the use of frozen fruits and vegetables and especially fruit-juice concentrates, shipping agencies have had difficulty in keeping up with the demand for facilities using the ice and brine method, especially for cargoes requiring temperatures



A partially loaded car. Floor and wall racks provide cooled air circulation all around the cargo. The Frigidaire cooling unit is shown in the bulkhead

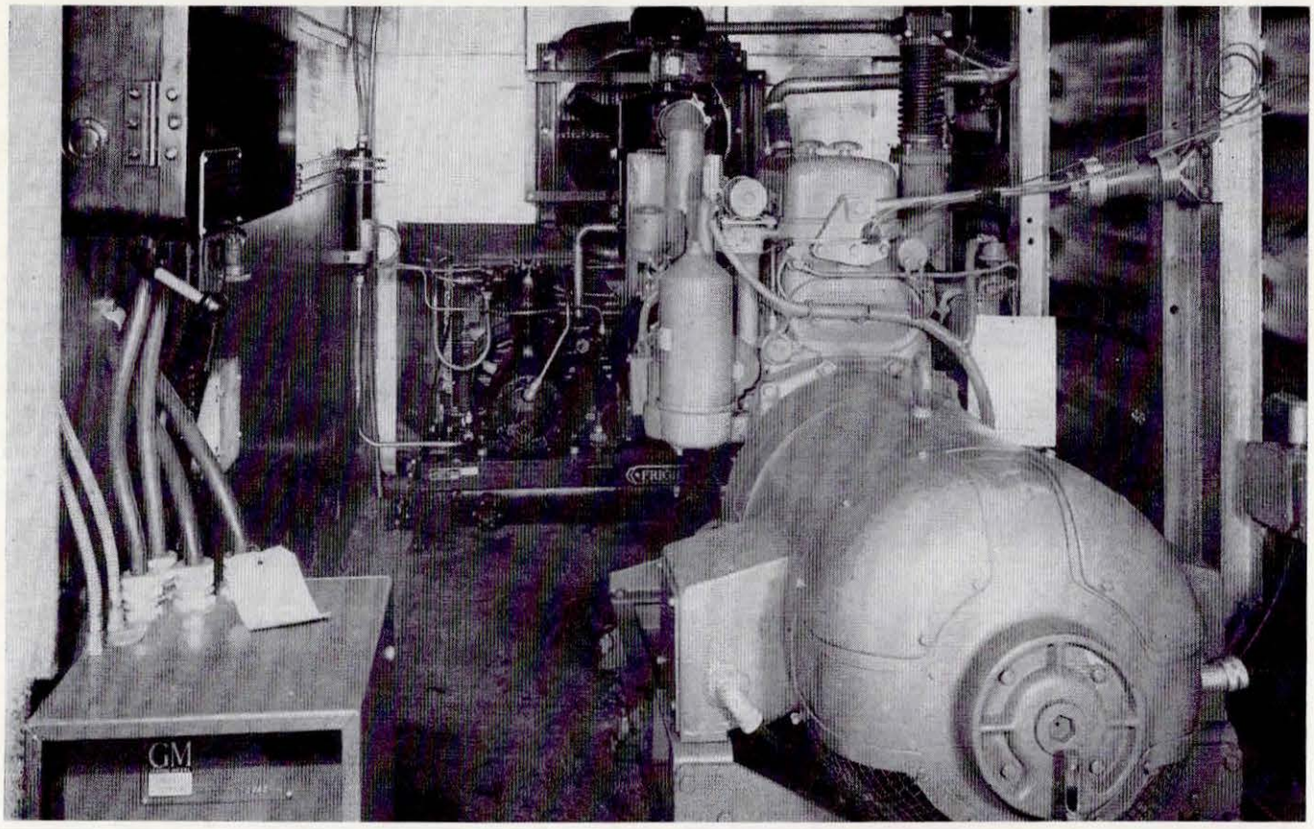
below freezing. Present cars must be extensively precooled, carefully iced and salted for such operation; the cargoes themselves are often cooled to —15 deg. F. to —20 deg. F. to give them a "start" for their trip. Besides the initial car precooling, which may be done by blasting cold air through the car, the initial icing of the average refrigerator car requires about 10,000 lb. of ice and 3,000 lb. of salt. Reicing requires that such cars be cut out of trains at icing stations, placed in a grid of about 24-hour intervals, north and south, east and west, on railroad networks. Stops at each of these icing stations may be required according to the cargo and prevailing temperature conditions. Considering the materials and manpower required, this system would be entirely impractical were it not for the fact that a carload of concentrated fruit juices may be valued at $10,000 to $25,000.

Contrasted to the ice and brine method, the mechanized cars of the Fruit Growers' Express Company each use only eight-tenths of a gallon of fuel oil per hour. On a 10-day trip, as from Hillsboro, Ore., to Jersey City, N.J., only about 220 gal. of fuel, costing about $42 would be consumed. This is far less than the cost of original icing under the old system.

There is also a less obvious but important saving when brine is eliminated in these cars. Almost as effectively destructive as acid, the constant drip of salt water has reduced to rust millions of dollars worth of iron and steel in car bodies, trucks, journal boxes, springs, couplings and brake mechanism, to say nothing of the constant deterioration of bridges, rails, plates, spikes, crossovers and switches on the railroad properties. Electrically controlled equipment such as switches and signal devices have been particularly vulnerable to the ill effects of brine corrosion. The railroads, therefore, have much to gain by the evolution of a refrigeration system which can replace the salt-and-ice method of cooling refrigerator cars.

Before May 25, 1951, the Fruit Growers Express Company had 52 refrigerator cars in service with Frigidaire and Detroit Diesel Engine plants, some for as long as two years, without loss of cargo. With a greatly accelerated building program now under way, several hundred may be in operation during 1952. Hand in hand with this accelerated program will be a coordinated service training program conducted by Frigidaire and Detroit Diesel Engine Divisions. The current plan is to attempt extensive service only at strategic points which may be several days apart. Between these points, possibly at each of the present icing stations, men will be stationed to inspect the cars and refrigeration equipment and record gage readings and temperatures.

The mechanical cooling system consists of a Frigidaire compressor, condenser, cooling coils and a diesel-electric unit to supply the necessary electric power. A Detroit Diesel engine is used as the source of power in operating the refrigeration system. It is a 34-hp. unit with two cylinders, 71 cu. in. displacement, and turns over at 1,200 r.p.m. at constant speed. A Delco Products alternating-current generator is directly connected to the diesel engine shaft. The generator is rated at 20 kw., three phase, a.c., 230 volts, and operates the Frigidaire compressor motor, the ¼-hp. radiator-fan motor, blower fans, defrost heaters in the cooling coil and a 230-volt convenience outlet. A special tandem Frigidaire refrigeration compressor, incorporating two compressor bodies



Above—In the machine compartment are the 34-hp. combination Detroit-Diesel-Delco Products alternating-generator unit and radiator fan (right); Frigidaire compressor (under fan); and electric control and operating controls boxes (left)

Below—The refrigerating plant is easily accessible through the side of the car. The engine and electrical control boxes are shown at the center and the dial thermometers are at the left, on the outside of the car

with a 7-hp. motor, supplies the refrigeration. This unit also has a large condenser and is cooled by three fans driven from the compressor motor. Freon 12 is used as the refrigerant.

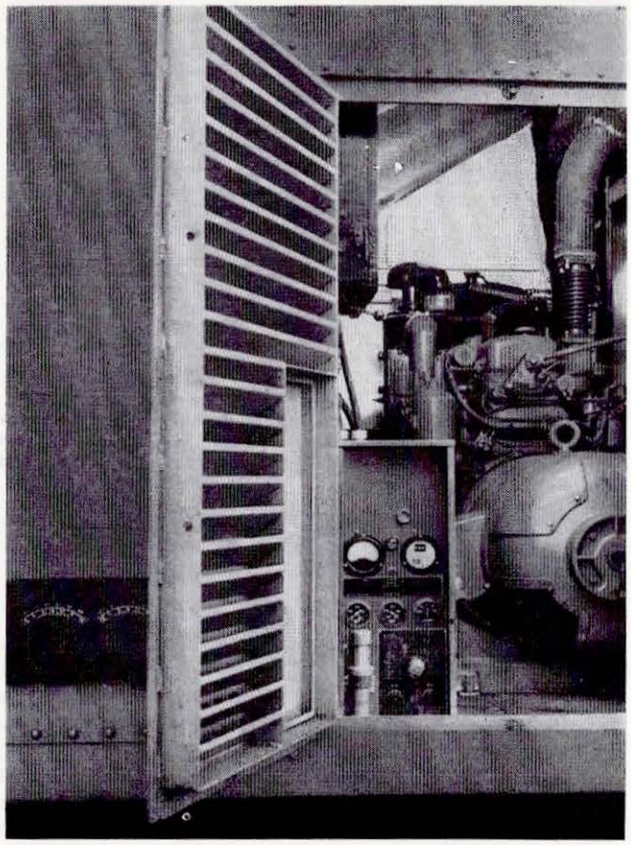
Located above this equipment is the large Frigidaire fin-and-tube type cooling unit with built-in defrost heaters, which is installed in an opening provided for air discharge into the interior of the car above the cargo. The defrost heaters are connected to a time clock which is preset to cut in the heaters and cut out the refrigeration system, thus accomplishing automatic defrosting.

Directly behind the cooling unit are two blower fans, driven by a 1-hp. motor, which force air across the coil and out into the car. The fan housings are ducted to the coil by flexible connectors.

Except for the 320-gal. fuel tanks beneath the car, all of the equipment involved in the refrigeration and power system is located in the compact machine compartment at one end of the car.

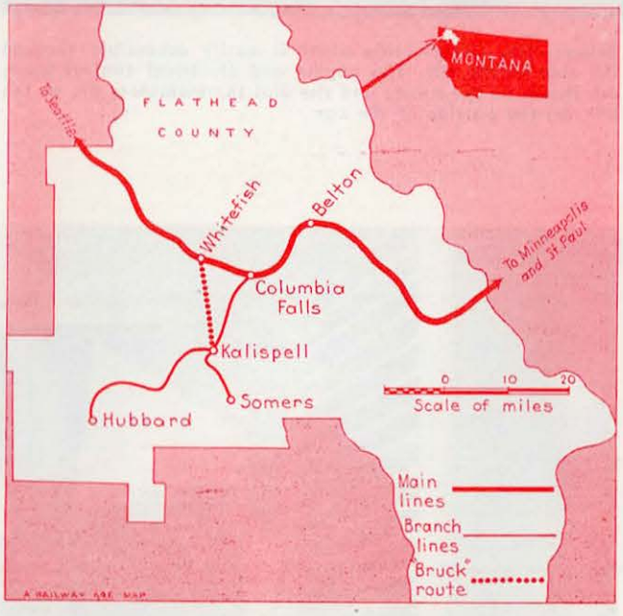
The refrigeration unit is cycled by a thermostatic switch set to hold the temperature of the car at zero degree. The generator runs continuously except for standby operation when an outside electrical source is obtained for running the refrigeration part of the equipment.

The inside of the car is constructed with side-wall and floor slats so that cargo is actually spaced away from the sides, ends, top, and bottom to receive maximum contact with the circulating cold air. Both 40- and 50-ft. cars are being equipped with these Frigidaire cooled diesel-powered systems.



THE "BRUCK" (bus-truck) posed for a publicity picture beside the "Empire Builder's" observation lounge before entering service at Kalispell last July

The "Bruck" Takes Over



By using the direct highway, the "Bruck" saves time for passengers and cuts expenses for the G.N. There is no passenger service between Kalispell and Somers and Kalispell and Hubbard

A highway "combine" solves a branch line problem for the Great Northern

Because it is the focal point for a sizable region that is productive of considerable travel the year around, the town of Kalispell, Mont., means more to the Great Northern's passenger business than its size (9,700 population) might at first indicate.

Prior to 1904, Kalispell was a division point on the G.N.'s St. Paul-Minneapolis—Seattle transcontinental line. In that year a line relocation left the town on a branch and the division headquarters was moved to Whitefish, where it remains today. When the new line went into service, the G.N. arranged a shuttle service for Kalispell passengers connecting with all main-line trains either at Whitefish or at Columbia Falls (where the Kalispell branch actually begins). In later years this shuttle service was performed by a motor train—popularly dubbed "the Galloping Goose"—which made four round trips daily, two of which extended into Whitefish.

Too Much Train

The "Goose"—although a minimum-sized train—had a greater passenger and head-end capacity than the Kalispell service normally required. Its operation became progressively less economical as paved highways and the private automobile cut into the passenger business. In order to maintain the service, the G.N. took the next logical step. On September 10, 1950, it discontinued the rail operation and substituted a direct Whitefish-Kalispell service on the highway, temporarily using a bus for passengers and a truck for the head-end business pending delivery of a new combination bus-truck unit.

Now these two services have been combined through the introduction of a custom-designed bus-truck unit called "the Bruck." Built by the Kenworth Motor Truck Corporation of Seattle, Wash., the 39-ft. "Bruck" accommodates 21 passengers in "parlor" type seats with a 24-ft. (875-cu. ft.) mail-baggage-express compartment

THE "GOOSE" pictured before retirement in September 1950. It was too much "train" for the job — and it had to go too far

in the rear. Its baggage-carrying capacity—an important consideration in the dude ranch and summer camp trade —is amplified by large overhead racks in the passenger compartment. The "Bruck" has a gross vehicle weight rating of 44,000-lb. and is driven by a Hall-Scott horizontal 220-hp. engine through a 10-speed transmission.

When seen on the highway, the "Bruck" is unmistakably Great Northern, for it is painted the same vivid green, orange and gold that identifies the road's streamliners. Similarly, its passenger compartment is styled in the manner of the "Empire Builder" in 3 shades of blue with blue super-needlepoint upholstery on the seats. Ventilation and heat are provided in both the passenger and freight compartments. The side walls of the freight compartment are lined with waterproof plywood while the roof lining is metal and the floor is 1¼-in. vertical grain fir.

Business Picked Up

Inauguration of the "Bruck" improved the railway's passenger service to and from Kalispell by affording connections with all first class trains. Also, by using the direct highway, the vehicle negotiates the Whitefish-Kalispell run in about one-half the time required for the "Goose" to go "around the horn" via Columbia Falls. Although there has not been time to compile operating statistics on the "Bruck" in this service, it is readily apparent that it can effect a substantial saving in fuel, crew costs and vehicle mileage compared with the motor train and with the bus and truck operation as well.

The Kalispell shuttle service is operated solely to serve passengers and head-end traffic having a prior or subsequent movement by rail. Local passengers between the two towns are carried by the Hungry Horse Coach Line whose route extends a few miles further east to the off-line community of Martin City. The coach line's schedule, being determined by local conditions, does not fit the needs of Great Northern through train passengers.

Although the actual income from the "Bruck" route is relatively small, its passengers and head-end traffic contribute substantially to the G.N.'s rail passenger income because of the long average journey on the "Empire Builder," the "Western Star" or the "Fast Mail" to Whitefish from midwestern or Pacific coast cities.

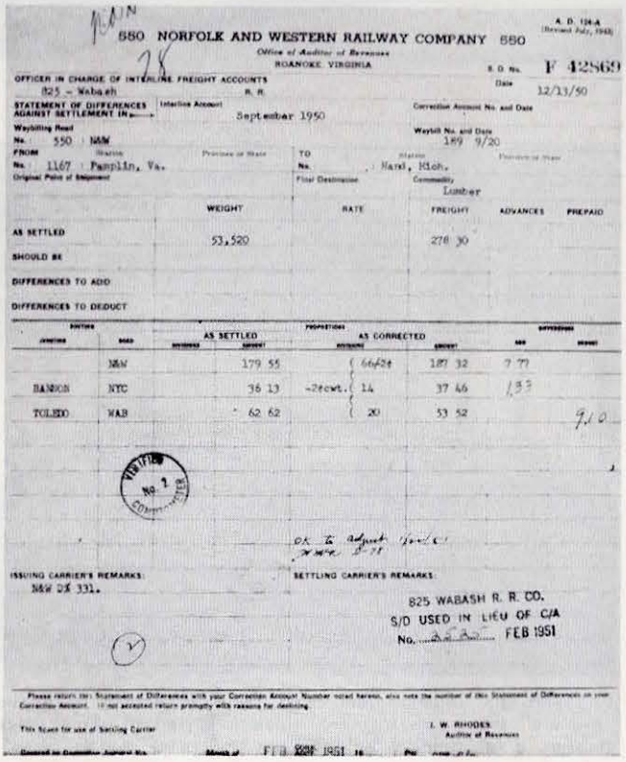
PASSENGERS shuttle from their train to Kalispell in the "Bruck's" front compartment which is styled in three tones of blue, a la "Empire Builder"

MAIL, BAGGAGE AND EXPRESS are carried in the "Bruck's" 875-cu. ft. heated and ventilated freight compartment. The floor is the same height as a railroad car floor

How the Wabash Handles Correction Accounts Photographically

By H. H. FETT
Comptroller, Wabash

The Wabash, in the past few years, has saved large amounts of money through the use of photography in the handling of interline settlements. As our former comptroller, Mr. Eastman, said in an article in the November 25, 1950, issue of *Railway Age*, we began the use of photography in settling interline accounts with our direct connections in January 1950. More recently we found another use for photography in the handling of "correction accounts." Corrections occur when the destination carrier in an interline movement prorates the revenue in a manner which one or more of the other participating carriers believes to be incorrect. These roads file with the settling road what is known as a statement of differences.



550 NORFOLK AND WESTERN RAILWAY COMPANY 550
Office of Auditor of Revenues
ROANOKE, VIRGINIA

S.O. No. F 42869
Date 12/31/50

OFFICER IN CHARGE OF INTERLINE FREIGHT ACCOUNTS
825 - Wabash R. R.

STATEMENT OF DIFFERENCES AGAINST SETTLEMENT IN ——→ Interline Account September 1950

Correction Account No. and Date

Waybilling Road No. 550 N&W
FROM Station Pulaski, Va.
No. 1167
Original Point of Shipment

TO Station Hazel, Mich.
No.
Final Destination
Commodity Lumber

	WEIGHT	RATE	FREIGHT	ADVANCES	PREPAID
AS SETTLED	53,520		278 30		
SHOULD BE					
DIFFERENCES TO ADD					
DIFFERENCES TO DEDUCT					

JUNCTION	ROAD	PROPORTIONS AS SETTLED	PROPORTIONS AS CORRECTED	AS SETTLED	AS CORRECTED	DIFFERENCES
	N&W	179 55	(66424	187 32	7 77	
BANDON	NTC	36 13	-2cwt.(14	37 46	1 33	
TOLEDO	WAB	62 62	(20	53 52		9.10

OK to adjust Jan C
N&W DF 331.

ISSUING CARRIER'S REMARKS:
N&W DF 331.

SETTLING CARRIER'S REMARKS:
825 WABASH R. R. CO.
S/D USED IN LIEU OF C/A
No. 2230 FEB 1951

Please return (to) Statement of Differences with your Correction Account Number noted hereon, also note the number of this Statement of Differences on your Correction Account. If not accepted return promptly with reasons for declining.

This Space for use of Settling Carrier

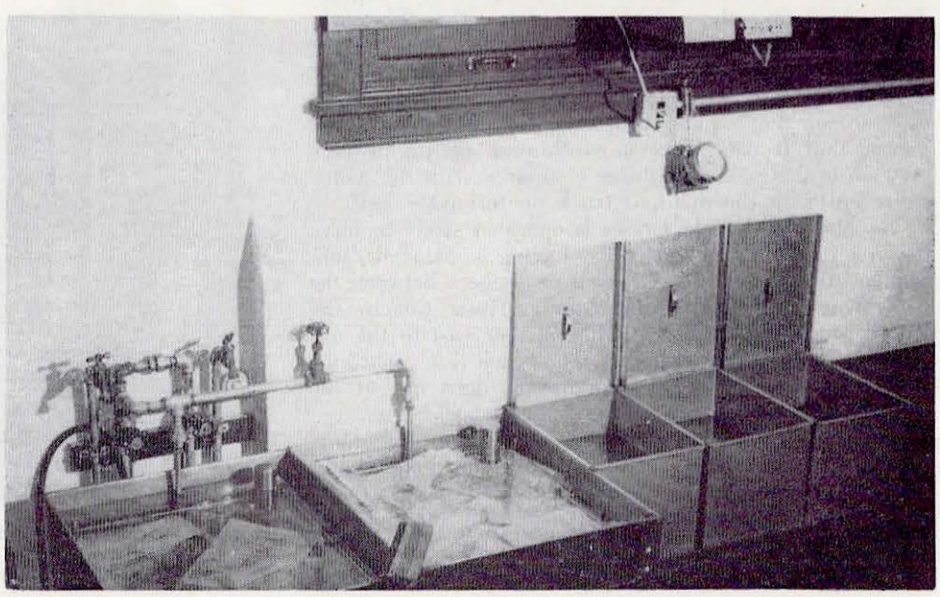
J. W. RHODES
Auditor of Revenues

Passed for Correction Account No. Month of FEB 1951 19 Per ... of ...

Photograph of a typical statement of differences with mask applied; legibility is good

The process of using photography in the handling of correction accounts is a simple one. When the statement of differences is received by us from another carrier, we check to see if the settlement indicated by the carrier issuing the statement of differences is correct, and, if so, we naturally approve the settlement indicated by the protesting carrier. Then a stamp is placed in the "settling carrier's remarks" column on the protesting road's statement of differences (see illustration), a mask is applied and the whole is photographed. A positive copy of the photograph is sent to each road involved in the settlement. Incidentally, if we can persuade roads to accept negative copies instead of positives, we can save considerably more time and money in doing this work. To date, we have made more than 10,000 settlements by this method.

The equipment cost for setting up for this type of photographic installation is not great. All equipment necessary for doing this work cost us $1,875. Developer costs us about $1.45 per thousand prints, fixer $1.60 per thousand prints, and sensitized paper runs to about $.04 per sheet. Average production of one person operat-



Equipment for developing, washing, fixing and drying exposed film

PHOTOGRAPHY IN WABASH ACCOUNTING OPERATIONS

Since June 1948, when the Wabash began microfilming waybills and other records, some 7,500,000 documents have been microfilmed. Records now are boxed and warehoused until they may be destroyed; the microfilm copy is used for office reference. In addition to saving filing space, much time is saved by eliminating the former operation of sorting and binding waybills.

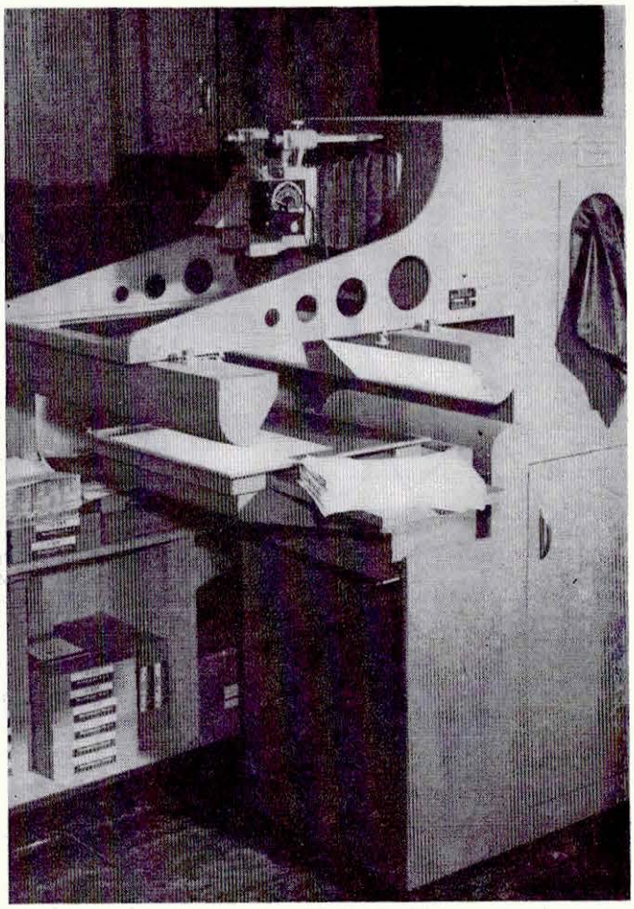
In handling interline settlements since January 1950, the Wabash has returned more than 250,000 original waybills to issuing carriers. The Wabash no longer has to answer inquiries from issuing carriers for information appearing on original waybills furnished as the interline settlement.

Another application of the photographic process to accounting work is in tracing for settlements of unreported passenger ticket coupons. The coupons are forwarded to the selling carrier and a photographic copy is retained for our record, thereby eliminating manual preparation and handling of ticket tracers by the originating and receiving offices.

The Wabash estimates that the use of photography in its accounting work is reducing clerical costs by about $25,000 per year, and "the additional saving as a result of 100 per cent accuracy is hard to measure."

ing the equipment is between 350 and 400 complete pictures per day. Two persons using the equipment could double this production. We gain a two-thirds saving in labor, using this method, as compared with writing or typing correction accounts.

In handling shippers' transit claims the Wabash prepares, by the photographic process, the extra copies of detail required. Copies of corrections are converted into correction accounts by the same process used in transforming the s.d. to a correction account.



The Remington Rand "Dexigraph" camera does the work of "copying" swiftly and of course with 100 per cent accuracy

Slightly Less Wood Treated in 1950

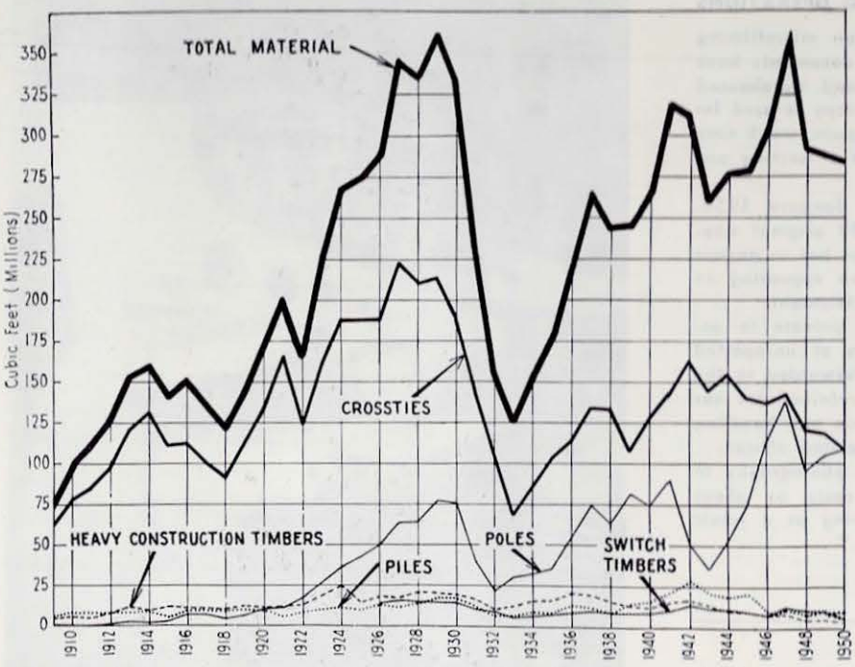
Decrease in the treatment of crossties, switch ties, and construction timber offset increases in all other categories

For the third successive year there was a decrease in the volume of wood given preservative and fire-retardant treatment in 1950, this time to a total of 288,787,675 cu. ft. This volume represents a decrease of 1,768,269 cu. ft. from the amount treated in 1949. Wood treatment activities in 1950 required a total of 234,124,166 gallons of liquid preservatives and 9,390,600 lb. of solid preservatives, representing a decrease in the consumption of liquid preservatives of 1½ per cent, and an increase of 20 per cent in the use of solid preservatives. These figures, and others following, are taken from the annual compilation of wood-preservation statistics assembled by Henry B. Steer, Forest Service, United States Department of Agriculture, in cooperation with the American Wood-Preservers' Association.

Crossties Still Lead

As has been true since compilation of the statistics was started in 1909, crossties continued to be the largest class of material treated, the total of 36,499,245 crossties (109,497,735 cu. ft.) being about nine per cent less than the volume treated in 1949. However, crossties retained their first-place rank by the narrowest margin in the history of the preservation statistics, exceeding the volume of poles treated by only 27,477 cu. ft. Approximately 68 per cent of all crossties reported were given treatment with creosote or creosote-coal tar solution, and about 32 per cent with creosote-petroleum solutions. The remaining less than one per cent were treated with various other preservatives.

For the second time in four years, poles barely missed



The trend of wood preservation from 1909 to date. Note the rapid gain in recent years in the quantity of poles treated

becoming the largest category of wood products to be given preservative treatment. Even so, the 6,219,901 poles, representing 109,470,258 cu. ft., that were given preservative treatment in 1950 did not approach the record high of 142,500,389 cu. ft. treated in 1947, or the 114,410,210 cu. ft. treated in 1946. Of the total number of poles treated, 5,380,585 were treated with creosote, 376,813 with creosote-petroleum-pentachlorophenol solution, 168,721 with creosote-petroleum solution, 165,805 with petroleum-pentachlorophenol solution and 127,977 with other preservatives. More than 86 per cent of these poles were treated by the pressure process.

In 1950 a total of 2,923,931 cross arms, representing 1,812,252 cu. ft., were given preservative treatment. This was an increase of 30 per cent as compared with the amount treated in 1949.

Demand for Treated Lumber High

Because of the increasing quantities treated, lumber and fence posts were classified individually for the first time in 1950, having previously been included in the category of miscellaneous material. Of these, lumber ranks third among all classes of material given preservative treatment. This high ranking was attained by virtue of a total of 316,014,916 ft. b.m. (27,044,078 cu. ft.) having been given preservative treatment in 1950. This total represents an increase of about 14 per cent as compared with the quantity treated in 1949. Almost all of the lumber given preservative treatment was treated by the pressure process.

The total quantity of piles reported treated with preservatives in 1950 was 18,159,972 lin. ft., representing 12,281,589 cu. ft., or about 12 per cent more than was treated in 1949. More Southern pine piles were given preservative treatment than any other species. Douglas fir piles were a very poor second with only about one-third as much footage as Southern pine. The remainder consisted of oak and miscellaneous species.

Almost all of the piles treated in 1950 were given pressure treatment. About 95 per cent of the total, or 17,278,632, lin. ft., were treated with creosote or creosote-coal tar solutions, and 595,033 lin. ft. were treated with creosote-petroleum solution. The remainder (about 2 per cent) were treated with other preservatives.

Fewer Switch Ties Treated

A total of 107,684,025 ft. b.m. (8,973,669 cu. ft.) of switch timber was given treatment in 1950. This was over 17 per cent less than the amount treated in 1949, representing the largest decrease, percentagewise, of any category of material given preservative treatment. Creosote or creosote coal-tar solution was used to treat about 77 per cent of the switch ties, while creosote-petroleum solution was used for the treatment of about 23 per cent. In 1950, all switch ties given treatment were pressure treated.

Construction timbers, consisting of stringers, sheet piling, beams, posts, caps, and sills for such structures as trestles, bridges, wharves and docks, were treated to the extent of 69,325,920 ft. b.m. (5,777,160 cu. ft.) in 1950.

This total was 10 per cent less than was treated in 1949. The data given are subject every year to the Forest Service's proviso "that since some of the treating plants do not keep separate records of timber and lumber, it is probable that some of the material listed as lumber should be included as construction timbers."

Fire-Retardant Treatment Increased

About 75 per cent (52,345,033 ft. b.m.) of the construction timber given preservative treatment in 1950 was treated with creosote or creosote coal-tar solution; 13,698,893 ft. b.m. were treated with creosote-petroleum solution; and the balance with other preservatives—nearly all by the pressure method.

The volume of wood given fire-retardant treatment in 1950 totaled 8,514,740 ft. b.m., or 6 per cent more than was treated in 1949. This treatment required the use of 1,768,744 lb. of dry chemicals, most of which consisted, as in the year before, of chromated zinc chloride, Protexol or Minalith.

The quantity of wood products not covered by other classifications given preservative treatment in 1950 totaled 35,586,093 ft. b.m. (2,965,508 cu. ft.) or an increase of 12 per cent as compared with the amount treated in 1949. Had the quantities of treated lumber

TABLE I—WOOD PRODUCTS TREATED

	1950 (cu. ft.)	Comparison with 1949
Crossties	109,497,735	—10,577,832
Poles	109,470,258	+ 3,311,528
Lumber	27,044,078	+ 3,255,071
Piles	12,281,589	+ 1,287,775
Switch ties	8,973,669	— 1,889,163
Fence posts	8,381,778	+ 2,441,677
Construction timbers	5,777,160	— 665,100
Wood blocks	2,583,648	+ 318,252
Cross arms	1,812,252	+ 420,060
Miscellaneous	2,965,508	+ 329,473
Total	288,787,675	— 1,768,259

TABLE II—CROSSTIES TREATED, BY KINDS OF WOOD AND PRESERVATIVES—1950

Kind of wood	Creosote[1]	Creosote-petroleum[2]	Petroleum-pentachlorophenol-solution	Miscellaneous	Total	Per cent of total
Oak	14,748,752	2,862,830	34,810	2,754	17,649,146	48
Douglas fir	12,267	3,184,823	0	9,914	3,207,004	9
Southern pine	2,303,570	882,585	0	75	3,186,230	9
Gum	1,528,808	817,376	0	0	2,346,184	6
Ponderosa pine	400	529,051	20,000	0	549,451	2
Lodgepole pine	0	501,309	0	0	501,309	1
Larch-tamarack	0	432,413	0	0	432,413	1
White fir	0	258,149	0	9,604	267,753	1
Spruce	1,515	154,737	0	0	156,252	—[3]
Hemlock	0	75,609	0	0	75,609	—[3]
Maple	0	64,018	0	0	64,018	—[3]
Cypress	35,231	0	0	0	35,231	—[3]
Elm	3,128	10,161	0	0	13,289	—[3]
All other	6,140,779	1,873,791	786	0	8,015,356	22
Total	24,774,450	11,646,852	55,596	22,347	36,499,245	
Per cent of total	68	32	—[3]	—[3]		100

[1] Includes distillate coal-tar creosote and solutions of creosote and coal-tar
[2] Includes various percentage solutions of creosote and petroleum
[3] Less than ½ of 1 per cent

and fence posts, which were included in this classification in previous years, not been given individual status in the 1950 report, the volume of miscellaneous material given preservative treatment would have set an all-time high. In fact, to facilitate yearly comparisons and preserve the record of trends, lumber and fence posts treated in 1950 were included under the "miscellaneous" heading in one of the major tables in the Forest Service report, showing that this classification exceeded by more than 2,000,000 cu. ft. the record amount treated in 1948.

TABLE III—NUMBER OF POLES TREATED IN 1950

Kind of wood	Pressure treated		Non-pressure treated
Southern pine	4,552,387		11,231
Western red cedar	9,533		555,696
Lodgepole pine	303,373		105,412
Douglas fir	378,824		25,240
Larch-tamarack	41,646		73,908
Northern white cedar	112		87,212
Ponderosa pine	35,034		0
Miscellaneous	30,005		10,288
Total	5,350,914		868,987
Grand total		6,219,901	

Consumption of Preservatives

Of the 234,124,166 gal. of liquid preservatives used by the wood-preserving industry in 1950, 201,744,993 gal. consisted of creosote. Of this, 63,538,557 gal. were reported as creosote coal-tar solutions. This was slightly more than was used in 1949. The use of petroleum dropped from 36,286,916 gal. in 1949 to 31,471,007 gal. in 1950 (a decrease of 13 per cent) and the amount of creosote-petroleum solution decreased about 14 per

TABLE IV—PILES TREATED, BY KINDS OF WOOD AND PRESERVATIVES—1950
(Lineal feet)

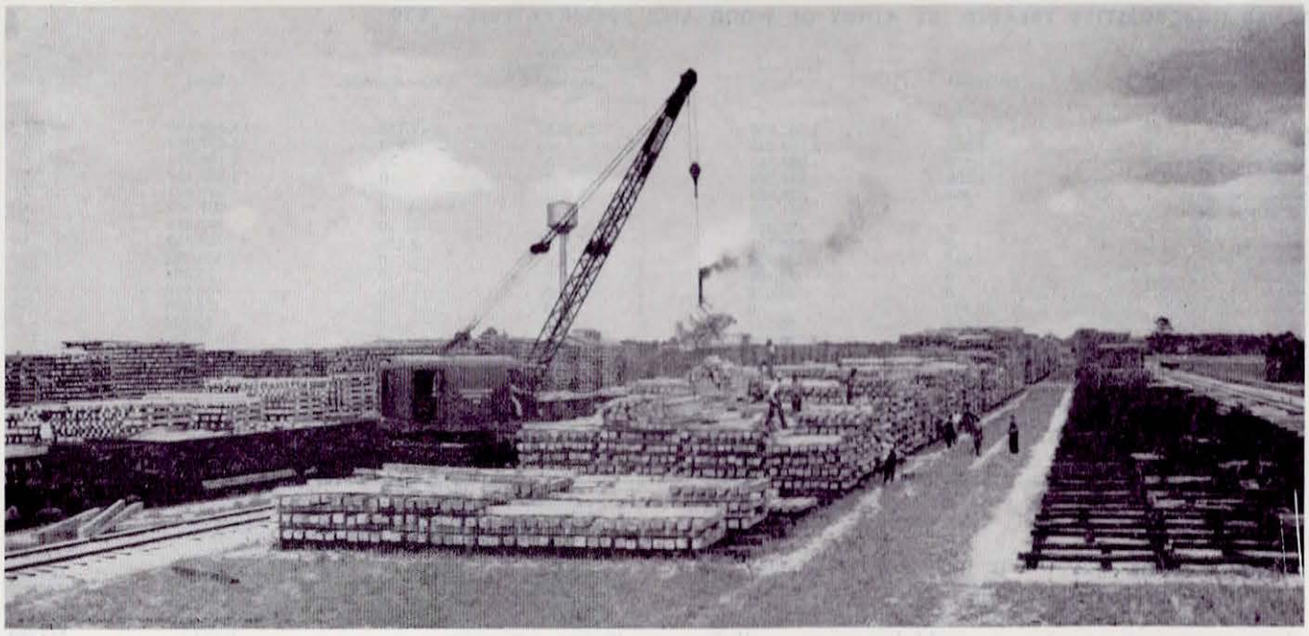
Kind of wood	Creosote[1]	Creosote-petroleum[2]	Petroleum-penta-chlorophenol solution	Miscellaneous preservatives	Total
Southern pine	12,865,205	123,795	171,476	1,500	13,161,976
Douglas fir	3,829,313	416,608	3,500	22,330	4,271,751
Oak	429,284	—	—	—	429,284
Norway pine	91,028	—	—	—	91,028
Western red cedar	2,503	48,230	—	525	51,258
Miscellaneous	61,299	6,400	—	86,976	154,675
Total	17,278,632	595,033	174,976	111,331	18,159,972
Per cent of total	95	3	1	1	100

[1] Includes distillate coal-tar creosote and solutions of creosote and coal-tar.
[2] Includes various percentage solutions of creosote and petroleum.

TABLE V—SWITCH TIES TREATED BY KINDS OF WOOD AND PRESERVATIVES—1950
(Feet, board measure)

Kind of Wood	Creosote[1]	Creosote-petroleum[2]	Miscellaneous preservatives	Total	Per cent of total
Oak	52,548,710	3,686,842	108,820	56,344,372	52
Gum	4,406,620	4,881,654	—	9,288,274	9
Douglas fir	33,463	5,843,282	28,728	5,905,473	6
Southern pine	3,037,909	440,346	—	3,478,255	3
Maple	—	2,604,428	—	2,604,428	2
Lodgepole pine	—	890,979	—	890,979	1
Larch-tamarack	—	460,236	32,736	492,972	—[3]
Jack pine	—	119,592	—	119,592	—[3]
Engelmann spruce	—	118,000	—	118,000	—[3]
Elm	—	36,216	—	36,216	—[3]
Ponderosa pine	6,195	13,152	—	19,347	—[3]
Birch	—	10,865	—	10,865	—[3]
All other	22,994,282	5,380,970	—	28,375,252	26
Total	83,027,179	24,486,562	170,284	107,684,025	
Per cent of total	77	23	—[3]		100

[1] Includes distillate coal-tar creosote and solutions of creosote and coal-tar.
[2] Includes various percentage solutions of creosote and petroleum.
[3] Less than ½ of 1 per cent.



The crosstie seasoning yard of the American Lumber & Treating Co. at Florence, S. C.

cent. The petroleum used in such solutions in 1950 was 26,147,760 gal., or 4,913,696 gal. less than the amount used in 1949.

Only one or two plants reported the use of straight zinc chloride and copper napthenate in 1950, and therefore the amounts of these solid preservatives were not listed individually in the Forest Service report but were included in "miscellaneous" preservatives. Several plants, however, reported the use of Chemonite and Green salt, and these items were given individual status for the first time.

Of the 9,390,600 lb. of solid preservatives used in 1950, more chromated zinc chloride was used than any other preservative, yet its 2,657,320 lb. was about 9.5 per cent less than the quantity used in 1949. Pentachlorolphenol also decreased 43,547 lb. to a total consumption of 2,245,067 lb. Likewise the consumption of Minalith decreased 32,208 lb. to a total of 165,719 lb. All of the other solid preservatives classified were used in larger amounts in 1950 than in 1949. The use of Protexol increased 553,504 lb. to a total of 1,231,945 lb. Increases also occurred in the use of Wolman salts (Tanalith), copperized chromated zinc chloride, Celcure and Osmose. Of these the largest increase (557 per cent) occurred in the use of copperized chromated zinc chloride of which 648,566 lb. were used in 1950.

TABLE VI—FIRE-RETARDANT TREATMENT OF WOOD

	Wood treated (ft. b.m.)	Pounds of chemicals used (dry basis)
1942*	22,284,402	5,151,284
1943	65,636,518	20,779,511
1944	8,527,428	2,111,967
1945	6,748,626	1,803,500
1946	4,466,565	1,020,809
1947	5,024,893	1,136,291
1948	9,579,787	1,582,437
1949	8,038,637	1,348,757
1950	8,514,740	1,768,774

*First year of record.

TABLE VII—PRESERVATIVES USED IN 1949-1950

	1949	1950
Liquids (gal.)		
Distillate coal-tar creosote	135,673,715	138,206,436
Solutions of coal-tar and creosote	64,831,237	63,583,557
Total creosote and coal-tar	200,504,952	201,744,993
Petroleum	36,286,916	31,471,007
Miscellaneous	908,116	908,166
Total liquids	237,699,984	234,124,166
Creosote-petroleum solution[1]	54,844,078	47,091,658
Solids (lb.)		
Chromated zinc chloride	2,903,587	2,657,320
Pentachlorophenol	2,288,614	2,245,067
Protexol	678,341	1,231,845
Wolman salts (Tanalith)	1,003,992	1,197,617
Celcure	138,829	683,676
Copperized chromated zinc chloride	98,703	648,566
Minalith	197,927	165,719
Chemonite	(2)	137,368
Green salt	—	120,806
Osmose	80,871	94,095
Miscellaneous	410,299	208,521
Total solids	7,801,163	9,390,600

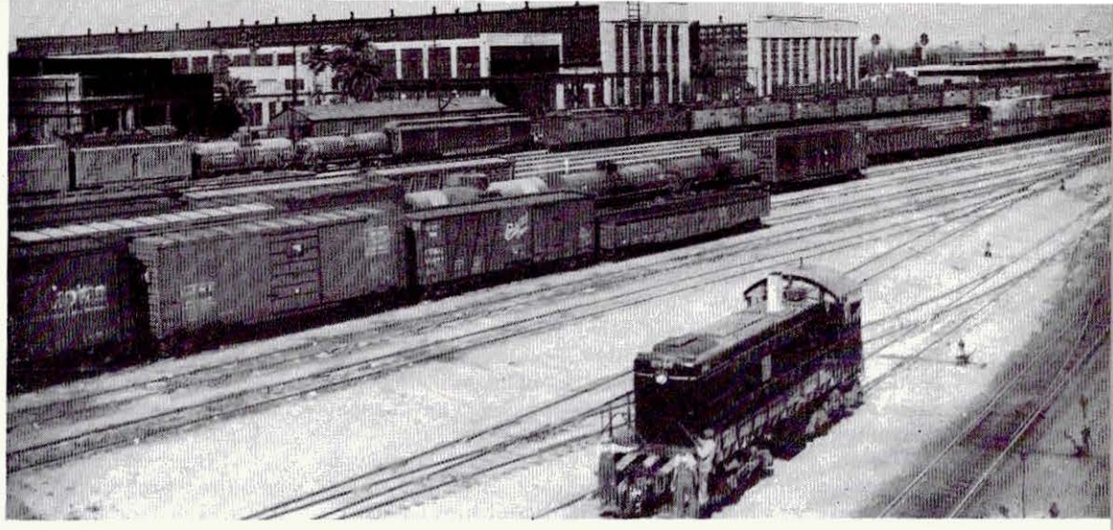
1 The creosote and petroleum contents of this solution are included in the amount of these items given above
2 Included in Miscellaneous

More Plants in Service

There were 276 treating plants in operation in 1950—14 more than in 1949. Of all the plants in operation, 194 were pressure plants, 67 were of the non-pressure variety, and 15 were equipped for both types of treatment. Twenty of the pressure-treating plants were owned or operated by railroads for their exclusive use.

"We cannot say too often that a fair solution of the major problems of transportation, and particularly those which affect the railways, is essential for the continuance of private enterprise, not only in transportation, but in all other basic industries, because if the agencies of transport should fall into the hands of the government, complete socialization of industry would follow quickly."—*P. Harvey Middleton, president, Railway Business Association.*

Hear "three requests" from Tariff Research Group and committee reports on rates and classifications —Aitchison talks on valuation



The N.A.R.U.C., at its annual convention at Charleston, S. C., adopted a resolution calling for appointment of a committee of commissioners to cooperate with the railroads' new Tariff Research Group toward simplification of freight tariffs

A Railway Age Convention Report

State Commissioners Meet at Charleston

Basic problems [of tariff complexity] are of long standing and . . . will require patient and careful treatment until appropriate remedies are discovered," Charles S. Baxter, chairman of the railroads' new Tariff Research Group, told the executive committee of the National Association of Railroad and Utilities Commissioners at Charleston, S. C., on October 15.

Mr. Baxter's statement was made to the committee on the day preceding the opening of the association's 63rd annual meeting, which was held at the Francis Marion Hotel in Charleston October 16-19. The convention proper was featured, from the railroad standpoint, by an address by Interstate Commerce Commissioner Clyde B. Aitchison, and by committee reports on freight rates, classification, legislation and passenger deficits.

Regulators "Partly to Blame"

Pointing out that "regulatory bodies—federal and state—must assume a share of the blame for the complex condition of our freight tariffs," because "the very nature of some of the decisions from public authority precludes simple compliance in the tariffs," Mr. Baxter submitted "three specific requests" for consideration by the N.A.R.U.C., namely:

1. That the association "designate a small committee" with which the Tariff Research Group can "carry on consultations and through which proposals of ours might have some preliminary consideration, and perhaps dissemination to a wider base of the membership."

2. That "individual state commissions . . . supply us with copies of rules and regulations pertaining to the form, arrangement and filing of tariffs naming intrastate rates."

3. That "the ability of tariff makers be considered prominently at the time you are arriving at your conclusions, and, in framing the details of your orders and expressing their terms, set up requirements which can be complied with readily without sacrifice of the desired result or clarity in publication."

The Tariff Research Group, Mr. Baxter said, is "expected to get at the grass roots of every single feature in the make-up of our body of tariffs; find out how well or how badly each one of them is doing the job intended for it; clear out the debris; prop up the 'cripples' and construct a type of tariff which is as near as possible the ideal vehicle for use by the average tariff user. Every proposal—every idea—will be coldly analyzed from a single viewpoint—will it expedite the ascertainment of the rate and will it promote accuracy?"

Rates and Classification

Freight rates and classifications were also the subject of two committee reports presented to the convention proper—those of the Committee on Rates of Transportation Agencies, headed by Elmer W. Cart, member of the Public Service Commission of North Dakota, and of the special Committee on Uniform Motor Freight and Railroad Classification, of which S. H. Flint, director of the Transportation Rates division of the Georgia Public Service Commission, was chairman.

Mr. Cart's committee, after reviewing the Ex Parte 175 and 177 cases, pointed out that:

"Rates of transportation agencies during the past several years have not advanced as much as the general run of prices or the cost of living. However, increased rates have had a very substantial effect on increased costs of commodities and costs of living. It is volume and some improvements in equipment that have enabled the carriers to continue making a profit even though that profit is not as high on a rate of return basis as industry generally. If the costs of operations of the transportation agencies go up it is inevitable that at least a part of such increased costs will be reflected in their rates and charges which they assess the public. Administrative agencies have no other choice but to allow them if our transportation facilities are to continue to render service in full vigor. These agencies have had no control over the increases in costs. The levels of rates, however, are going up to the point where there has been substantial diversion of tonnages, or the complete stopping of the movement. This has brought great concern to many. Reductions in rates to meet competi-

tion or to encourage the movement of traffic are slow in becoming effective, sometimes due to delayed action on behalf of administrative agencies but more often extremely slow decision by the carriers, particularly the railroads. Too often business has gone and adjusted itself to transportation via other means before reduced rates became effective. In other instances shortly after reduced rates were made effective, blanket increases in rates were authorized and filed, wiping out any benefits that might have flowed from them."

The committee cited the Railway Express Agency as "an outstanding example" of a case in which higher rates "have reached the point of diminishing returns"; and asked repeal of the 3 per cent federal tax on movement of freight by common carrier as being "on top of increasing costs" which "compel" such carriers "to seek increased rates."

Mr. Flint's committee devoted its report principally to a review of the history and present status of proceedings in I.C.C. Dockets No. 28300, *Class Rate Investigation, 1939*, and No. 28310, *Consolidated Freight Classification*, paying tribute in the process to work done both by the commission and by the railroads' Uniform Classification Committee.

The report pointed out that "the Uniform Classification will not entirely supersede any of the existing classifications except perhaps the Southern"; and that "the extent to which the Uniform Classification will cancel existing classification exceptions is a matter of conjecture at this moment." It warned "that there will be a brief transitional period . . . during which rate structures may seem more complex than ever before . . . We may for a short time have an annoying dual rate structure." But, it added: "State commissions and shippers should not become alarmed or discouraged about these temporary complications because within a very short time we should see the elimination of the many exceptions and special classifications which have contributed so much to rate complexity."

"Pigs Is Pigs"

"This, perhaps," the report said, "is the long awaited millenium. . . . Displeased as the theorists may be, there will be one great compensation—for the whole world should be illuminated by the radiant smile of 10,000 rate clerks who will bask in the glorious realization that whether it be in Official, Southern or Western territory . . . and whether it be intraterritorial or transcontinental, interstate or intrastate, pigs is pigs and pigs is first class."

The Committee on Legislation, headed by H. Lester Hooker, member of the Virginia State Corporation Commission, found "little activity" in the 82nd Congress on bills of interest to the N.A.R.U.C. and to state commissions. Its "cursory examination" of the proposed "Omnibus Transportation Bill" (S. 1889, introduced, by request, by Senator Johnson, Democrat of Colorado) indicated to the committee that its provisions "are not as advantageous from the state commission point of view as the existing provisions of the Interstate Commerce Act."

Lawrence W. Cannon, member of the Indiana Public Service Commission, and chairman of the special committee appointed by the N.A.R.U.C. at its 1949 meeting in Cleveland to study the railroad passenger deficit problem in cooperation with the I.C.C., reported progress, and briefly outlined the matters under study and the type of information already obtained or still being assembled. The committee hopes, Mr. Cannon said, to complete an interim report on or before May 1, 1952, and to submit a final report with specific recommendations at the association's 1952 convention.

Aitchison Talks on Valuation

Commissioner Aitchison's address, on "Valuation: the State Commissions and Section 19a," was largely devoted to an historical review of the origins and development of railroad valuation work. Concerning the present status of that work, he said in part:

"Decreases in successive appropriations . . . have required progressive reductions in the valuation staff. . . . One-third of the valuation employees of two years ago have been dropped from the roll. . . . The cumulative effect of this long continued process of compounded decimation is most alarming.

"Under conditions as they are, and even more so as they are threatened, the commission's duties as to correction of its valuations and keeping informed of changing conditions cannot be performed with justice to the public interest involved or to the carriers themselves. . . . An enormous amount of detail has been furnished to the commission in the last few years but for want of provision of a staff competent to police the returns and make necessary property inspections in the field, the valuation work is 'falling lamentably behind.' . . . Acceptance of returns at their face value is not safe, or consistent with the public interest, or fair to the carriers which have gone to great expense to make the reports. Guardianship of the accuracy of the public record gives it probative and practical value. . . .

"The present situation, has not entirely been brought about by the efforts of Congress to retrench expenditures, or reprisal for lack of confidence in the integrity of the work. It is in large part, I think, due to acceptance of the thought that certain recent decisions of the Supreme Court have so diminished in importance valuation and rate of return as factors in the rate-making process that they may be wholly ignored. . . .

"In recent years the carriers have been able to show the need for more revenue without invoking the constitutional protection against confiscation. But . . . when the inevitable process of deflation sets in . . . reduction rather than increase in rates will again be in order. Then value and rate of return once more will become a central factor in the inquiry."

The special Committee on Effect of Taxes on Utility Rates, headed by J. F. Craemer, member of the Public Utilities Commission of California, presented a resolution to the effect "that additional taxes levied by Congress upon the operations or services of regulated public utilities take the form of an excise tax, in order that existing rate structures may be continued, and that such taxes fall alike upon all users of the services of all utilities."

The subject of taxation was also discussed in the president's address, given by retiring President George H. Flagg, public utilities commissioner of Oregon. The balance of Mr. Flagg's address was devoted principally to utility and telephone, rather than to transportation, affairs.

J. C. Darby, vice-chairman of the Public Service Commission of South Carolina, was elected to succeed Mr. Flagg in the N.A.R.U.C. presidency, while Eugene S. Loughlin, member of the Public Utilities Commission of Connecticut, and C. L. Doherty, chairman of the South Dakota Public Utilities Commission, were elected first and second vice-presidents, respectively. John P. Randolph was reelected general solicitor and A. L. Roberts, Jr., was reelected assistant general solicitor and secretary-treasurer.

Letter from a Reader . . .

Covering the Coordinated Mechanical Associations

ALBANY, N. Y.

TO THE EDITOR:

Now that the September 17, 18 and 19, 1951, meetings of the Coordinated Mechanical Associations at the Hotel Sherman, Chicago, have been held and proved such a success both in business and attendance —

As secretary of the Master Boiler Makers' Association, permit me in behalf of our association to thank you and your company, for making it possible for C. B. Peck and his staff to be in attendance. In covering these meetings, they did a most wonderful job of preparing the daily report on the attendance, which I assure you was very much appreciated by the Coordinated Associations and the Allied Railway Supply Association. There is a question if these meetings could have been the success that they have been without the help of your company.

ALBERT F. STIGLMEIER
Secretary-Treasurer
Master Boiler Makers' Association

[We are grateful to Mr. Stiglmeier for his generous and unsolicited expression about the value of our editorial services. Having for our part observed the deep interest Mr. Peck and his associates in our mechanical department — not forgetting the late Roy V. Wright — have evidenced in the success of the Coordinated Mechanical Associations and the affiliated exhibit, it is gratifying to have our opinion confirmed from such an authoritative quarter.—EDITOR]

New Book . . .

WORLD RAILWAYS, an encyclopedic survey of railroad systems the world over, edited by Henry Sampson. 648 pages, profusely illustrated with photographs, maps, charts, drawings, etc. 8½ in. by 13 in. Bound in cloth. Published by Rand McNally & Co., Chicago. $25.

This first edition of a new work on the same plan as the well-known "Jane's Fighting Ships" is subtitled "1950-51" and is intended to be a survey of the operation and equipment of representative railroad systems throughout the world. The task of encompassing all of the world's rail lines in a single volume is herculean, to say the least, and perhaps it is unfair to be hypercritical about a work that is admittedly not without errors, omissions and discrepancies. No one person can possibly be expert on current practices of over 1,000 railroads in 73 different countries and many of the errors which have crept into the work should perhaps be charged against the help that Mr. Sampson *didn't* get, rather than to any important shortcomings of the editor or his staff.

Basically, World Railways is divided into six sections (North America, Central and South America, Europe, Africa, Asia, and Australia and New Zealand). Each section, in turn, is divided by countries, with the principal systems of each country described in detail and the short lines listed with an occasional brief description. The list of American short lines is amazingly complete and includes a number of lines not even in the Official Guide.

One of the great disappointments of World Railways is its overemphasis on motive power to the exclusion of almost every other component of a railroad. A railroad requires something more than just engines and cars to perform a service. Tracks, bridges, shops and other physical installations are equally important and their variation from country to country, continent to continent is certainly of as much interest as the variations in locomotives.

In his treatment of motive power, Mr. Sampson has revealed a personal devotion to the steam locomotive and the British tradition of custom building. This is particularly evident in the sections devoted to U. S. and Canadian roads where the amount of space devoted to steam, as compared to diesel motive power, is often far out of proportion to the relative number of such locomotives which the roads own and operate.

Because Mr. Sampson has treated American motive power by railroad (instead of by builder) he has duplicated a great many specifications and technical data on diesel power. He would have economized time and space if he had cataloged the products of our diesel locomotive builders in a separate section and then under each road merely listed the number of each type owned, with perhaps a representative photograph and some notes on special added equipment (train-radio, cab signals, train control, etc.).

Perhaps it is a tribute to the swift pace of improvements on American roads that Mr. Sampson describes steam power on several lines which are now all-diesel.

In the treatment of rolling stock there are few interior pictures of passenger cars, and the equipment of the Pullman Company and Wagon Lits is nowhere to be found. Much of the "representative" American passenger equipment pictured is of the vintage 1930 or before (described as originally built — minus air conditioning, reclining seats and other subsequent refinements). Few of the streamliners pictured are products of the postwar era. Nowhere is a roomette, double bedroom or any other sleeping car accommodation clearly described for the reader. Since many of the pictures and descriptions lack dates, a foreign reader of World Railways is apt to get a warped idea as to the character of American passenger services.

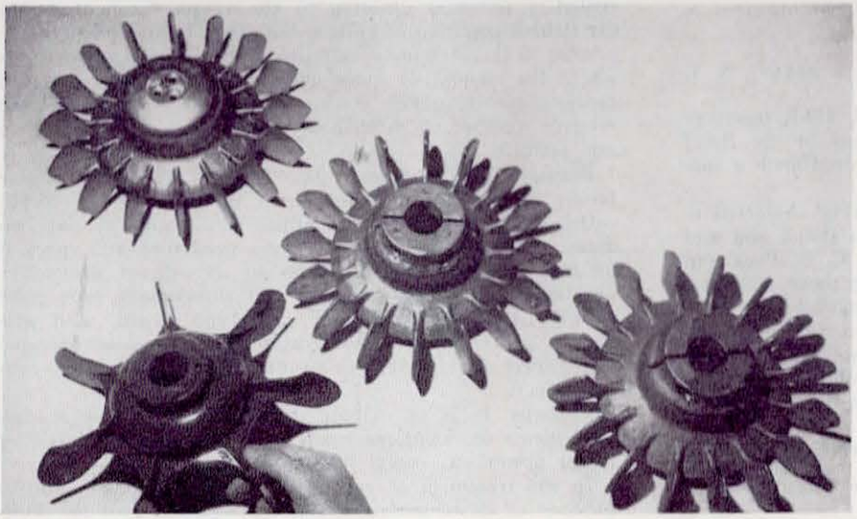
Conspicuous by absence in all sections of the book are details of the financial performance of the individual roads. Also worthy of more detailed treatment are the roadway, structures, signaling and communications equipment and shops of the individual roads. Some of these items are mentioned briefly and the editor has been quite careful to include clearance diagrams wherever they could be obtained. But a fairly careful "thumbing" of the American roads revealed only one chart of signal aspects (Baltimore & Ohio) and one photograph of a C.T.C. machine (Seaboard).

There were very few pictures of major bridges, and none of terminals, typical right-of-way, crossing protection equipment, signals or shop facilities. Statistics generally are no more recent than mid-1948.

World Railways is basically well organized, and is as easy to read as it is hard to put aside. Its representation of the British Railways is exceptionally complete but the railroads on the continent — at least outside the iron curtain — are well represented too. Browsing through its pages, one is reminded that the South Australia Government Railways' 5-ft. 3-in.-gage streamlined cars and locomotives are almost indistinguishable from the latest American equipment; that the South African Railways have a high-density suburban traffic out of Cape Town with modern (1939) multiple-unit electric passenger cars; that diesel switchers and de luxe air-conditioned buffet lounge cars can be found even in Malaya, that the Swiss Federal Railways have had a gas turbine electric locomotive in service since 1944; that a daily freight train on the electrified Paris-Bordeaux line of the French National Railways averages 40.4 m.p.h. terminal to terminal for the 361-mi. trip; and that the British Railways have a 228-ft. 10½-in. articulated flat car especially designed to transport structural steel and similar loads of up to 150 tons.

The wealth of material contained in World Railways should please both the professional railroad man and the amateur hobbyist. It should be a coveted addition to the library and a useful reference work.

New and Improved Products of the Manufacturers



Reinforced Plastic For Motor Fans

Plastics are now being used by the Westinghouse Electric Corporation to replace critical aluminum and bronze for blowers in small, totally enclosed, fan-cooled a.c. motors. The plastic blowers consist of a polyester resin, reinforced with glass fibers. Glass fiber has been found to be superior to organic fiber reinforcement.

The plastic blower has many advantages over the aluminum and bronze blowers it replaces. It is unaffected by chemical agents that attack the metals and hence is desirable for use in refineries, chemical plants, and process industries where corrosive atmospheres may be present.

The plastic blower is as much as one-third lighter in weight than its metal counterparts. While this may be but a matter of a few ounces, the reduction of inertia where frequent, rapid reversals are required is worthwhile. Preliminary tests indicate that the plastic blower has better resistance to abrasion than its predecessors.

These advantages are obtained without sacrifice in blower performance. The blower has successfully passed overspeed tests at four times normal speed. Westinghouse currently is applying these new plastic blowers to totally enclosed, fan-cooled Life-Line motors in N.E.M.A. frames 254 and 284, (5 and 7½ hp., 1,750 r.p.m.).

The auto-trailer unit includes a Jackson power plant to power the compactor and other electric power tools

Two passes of the Jackson Vibratory Compactor are sufficient for obtaining necessary compaction

Portable Compactor

Jackson Vibrators, Inc., Ludington, Mich., has placed on the market an improved machine, the Jackson Vibratory Compactor, for the compaction of asphalt, granular soils and waterbound macadam bases. Electrically operated, it propels itself at a rate of approximately 25 ft. per min.; delivers 4,500—1¾-ton blows a minute, and will compact an area of 900 to 1,200 sq. ft. per hr. It is said to be a rugged, reliable machine, having just one moving part—the shaft of the heavy-duty vibratory motor.

The compactor comes with two bases, one smooth and the other corrugated, which can be quickly interchanged. The smooth base is said to be advantageous for the compaction of asphalt mixes (either hot or cold), and for the construction of driveways, station platforms, railroad crossings and the like. The smooth base also readily consolidates subbases and base courses of crushed materials, and it is stated that water-bound macadam can be compacted to maximum density in two passes of the machine. The corrugated base is said to give best results in the compaction of granular soils in subbases, at bridge approaches, or wherever it is necessary to secure maximum density of such materials quickly.

This machine is also available with its own power plant in a complete autotrailer unit, thus providing quick maneuverability where frequent changes of locations are necessary, as in pavement patching at widely spaced highway crossings and driveways. On this unit is mounted a 2.5 kva. Jackson power plant and an hydraulic jack for picking up and lowering the compactor. The power plant generates both single-phase and three-phase 110-volt, 60-cycle alternating current and may be used to operate other electrically powered tools and lights as well as the compactor.

This is the new 3,000 lb. capacity "Hi Duty" fork truck of the Transitier Truck Company, Portland, Ore. This truck has single lever controls. The turning radius is given as 64 in.

GENERAL NEWS

Second National Standards Conference Held in N. Y.

The Association of American Railroads helps to coordinate and standardize methods for railroad operation and maintenance in the United States, Canada and Mexico, Gerald M. Magee, A.A.R. research engineer, said in New York on October 23. Speaking in the Waldorf-Astoria Hotel at the American Standards Association's company member conference held during the A.S.A.'s second National Standardization Conference, Mr. Magee emphasized his "belief that research offers some of the most effective tools for accomplishing standardization" and outlined specific instances of the manner in which the A.A.R. functions to obtain standardization.

"A joint committee," he continued, "has been established between the rail manufacturers technical committee of the American Iron & Steel Institute and the rail committee of the A.A.R. This committee meets two or three times annually and provides a common meeting ground for the views and experiences of rail users and manufacturers. Specifications for rail, joint bars, track bolts, etc., are agreed upon. Research under the auspices of this committee is conducted under a cooperative agreement with the University of Illinois to improve specifications or designs or to meet problems that may arise. . . The track committee of the A.A.R. meets jointly with the standardization committee of the Manganese Track Society and prepares standards for all frog, switch and crossing units. . . The A.A.R. committee on car wheels meets with representatives of wheel manufacturers to establish standard specifications and designs for both wrought steel and cast iron car wheels. . . Wherever practical, the A.A.R. makes use of the standards of the A.S.A. and representatives from the A.A.R. are frequently members of A.S.A. committees."

R. F. Bisbee, manager of quality control of the Westinghouse Electric Corporation, addressing the afternoon session of the company member conference, described a basic damage-reduction method applicable to industries where freight damage is a serious problem. The method, he said, "is based on the logical premise that if the packaged unit is tested before shipment, weaknesses in the packing or the product will be disclosed by the tests and can be corrected before losses occur."

C. W. Bryan, Jr., president of the Pullman-Standard Car Manufacturing Company, told several hundred industrialists meeting on October 24 in a Materials Conservation Forum held as part of the Standardization Conference, that the steel shortage is such that during the 12 months ended last September 21 his company, which had orders to fabricate 600,000 tons of steel, could obtain only 444,000 tons. "This shortage," he said, "means that all the company's plants are now operating at 60 per cent of capacity."

MASSACHUSETTS OKAYS TWO-MAN RDC CREWS

Permission to operate single Budd-built rail diesel cars in through passenger service between Boston and Springfield with a crew of only two men—engineman and conductor—has been granted to the Boston & Albany by the Massachusetts Department of Public Utilities. The department's order took the form of dismissal of a complaint brought on December 13, 1950, by the Brotherhood of Railroad Trainmen, asking that a brakeman or flagman be assigned to such cars in addition to the engineman and conductor.

In its order, the department pointed out that the B. & A. uses three men on single Budd cars in special circumstances, but held that such circumstances do not "constitute an admission of the necessity for the third man for reasons relating to the general public safety." It added that "the financial condition of respondent and of the railroads generally within the Commonwealth requires us to scrutinize with great care any proposal which will result in increased expense"; and that:

"In matters of public safety, as in most other social relationships, there is such a thing as a law of diminishing returns. While we do not intend to permit any carrier or other utility under our jurisdiction to fail or refuse to take every reasonable precaution to protect the public, there is a line which separates reasonable precautions from unreasonable requirements. We are of the opinion that to compel respondent to put another man on this essentially simple operation would be unreasonable. We feel that one more man would accomplish nothing which cannot be handled by the present crew in the absence of absurd hypotheses, such as the simultaneous death or disability of both the engineer and the conductor."

I.C.C. Approves Southern Roads' Bulwinkle-Act Pact

Division 2 of the Interstate Commerce Commission has approved, conditionally, the rate-procedures agreement filed by southern railroads and the Pullman Company under provisions of the Bulwinkle-Reed Act which is now section 5a of the Interstate Commerce Act. The proceeding out of which the division's report came is docketed as Section 5a Application No. 6.

The conditions imposed by the commission will require modification of the agreement in two respects, as suggested by the National Industrial Traffic League and other interveners representing shipper interests. One such change will eliminate all provisions which would have accorded to chairmen of the Southern Freight Association and Southern Passenger Association, and of committees of those associations, the right to docket for review any traffic matter "which has received the consideration of member lines through a mail vote," or "which has been the subject of a recommendation by any lower-ranking committee of traffic officers." The other change will add to the agreement provisions stipulating that notice of intention to permit the expiration of rates, which have been in effect for 15 months or longer, shall be placed on the public dockets of S.F.A. committees.

Entry of the commission's approval order was withheld pending receipt of formal advice that the parties to the agreement assent to the conditions and have amended the pact accordingly. As described generally in the report, the agreement provides for three organizations—the Southern Classification Committee, in addition to S.F.A. and S.P.A.

The organizations and procedures involved, the report continued, "are substantially the same as those in operation since 1920, except that between 1932 and 1949 two organizations of executives were maintained, the Southeastern Presidents' Conference and the Traffic Executive Association—Southern Territory, with review powers over determinations of the freight, classification and passenger associations. They were abolished with the adoption of the present agreement."

The Department of Justice was in its usual role, opposing favorable commission action on the agreement. As in previous Bulwinkle-Act cases, "Justice" failed to convince the commission that the agreement was "part of a nationwide plan for private control of the railroad industry under the domination of the Association of American Railroads."

D.P.A. Sets New Policy On Fast Tax Write-Offs

A tougher policy on granting certificates of necessity for accelerated amortization has been announced by the Defense Production Administration.

The new policy requires, among other things, that applications for fast write-off certificates be placed with D.P.A before construction of a new facility begins. This provision is effective November 1. Previously, such applications could be filed up to six months after construction actually started.

This new arrangement will permit D.P.A. to rule on the "shortage of the facilities and essentiality of the product" as the first step in handling applications for fast tax write-offs.

Announcement of the changed pol-

icy was made at the conclusion of the 60-day moratorium on certificates of necessity requested last August by Defense Mobilizer C. E. Wilson. During this "moratorium," D.P.A. actually granted more fast write-off certificates than during any comparable period since the program began last year.

Manly Fleischmann, D.P.A. administrator, said in announcing the new policy that availability of critical materials "will have an increasingly greater influence" on the order in which applications for certificates are processed.

D.P.A. also plans to review all applications for certificates of necessity now on file with the agency. Applicants will be asked for a report on whether they have actually started construction of the project involved, and whether necessary materials have been requested.

Meanwhile, the latest group of certificates approved by D.P.A. included 39 certificates for 29 railroads and car line subsidiaries. D.P.A. released dollar amounts on only 12 of these certificates, which are listed below:

Atlantic Coast Line, $303,073, 65 per cent.

Central of Pennsylvania, $889,867, 80 per cent.

Chicago, St. Paul, Minneapolis & Omaha, $991,299, 65 per cent.

Detroit & Toledo Shore Line, $697,323, 65 per cent.

Illinois Central, $913,470, 65 per cent.

Louisville & Nashville, $303,073, 65 per cent; and $388,205, 50 per cent.

Peoria & Pekin Union, $298,028, 65 per cent.

St. Louis Southwestern, $876,516, 65 per cent.

Southern Pacific, $891,326, 65 per cent.

Spokane, Portland & Seattle, $636,040, 65 per cent.

Western of Alabama, $292,281, 65 per cent.

The remaining certificates were so-called "September 23 exception" cases, and D.P.A. did not reveal amounts involved.

These September 23 cases were exceptions to the 60-day moratorium. D.P.A continued to process such cases during the period. Facilities completed or acquired between January 1, 1950, and September 23, 1950, had to be approved by D.P.A. not later than September 23, 1951, to be eligible for fast write-off benefits.

R. R. Young to Renew Efforts To Control Central

Robert R. Young, chairman of the Chesapeake & Ohio, recently returned from a European trip and reportedly announced plans for a series of conferences aimed at renewing his efforts to control the New York Central. Details about the proposed conferences were not revealed by Mr. Young.

The Interstate Commerce Commission, slightly more than three years ago, denied applications of Mr. Young and Robert J. Bowman, then president of the C. & O., for authority to serve on the N.Y.C. board while continuing to hold their positions as officers of the C. & O. (*Railway Age*, May 22, 1948, page 32.) The decision also denied the related petition of the C. & O. and the Alleghany Corporation for release of the C. & O.'s 400,000 shares of N.Y.C. common stock from the requirement whereby it was deposited with the Chase National Bank, as independent voting trustee, under the trusteeship created pursuant to the commission's June 5, 1945, order approving Alleghany's control of the C. & O.

CAR SURPLUSES, SHORTAGES

Average daily freight car surpluses and shortages for the week ended October 20 were announced by the Association of American Railroads on October 25 as follows:

	Surplus	Shortage
Plain Box	43	6,460
Auto Box	24	72
Total Box	67	6,532
Gondola	0	4,216
Hopper	0	5,620
Covered Hopper	0	60
Stock	59	1,528
Flat	0	846
Refrigerator	2,379	0
Other	384	97
Total	2,889	18,899

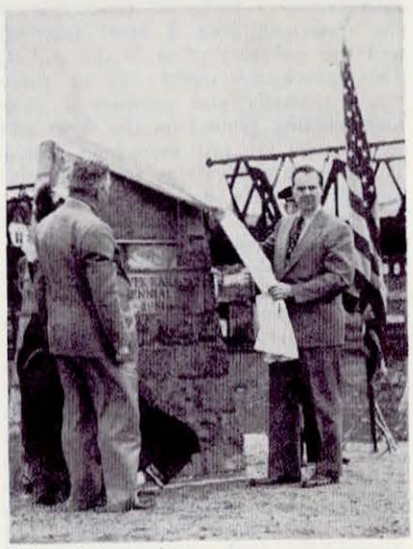
ORGANIZATIONS

E. G. Plowman Now Heads Traffic & Trans. Society

At a meeting of the directors of the American Society of Traffic & Transportation in Chicago, E. G. Plowman, vice-president — traffic of the United States Steel Company, was elected president of the society. He succeeds Charles H. Vayo, general traffic manager of the Eastman Kodak Company, who became chairman of the board. Robert J. Bayer, editor of Traffic World, was elected vice-president of the society, succeeding Mr. Plowman. All other officers were reelected. Herschel A. Hollopeter, transportation director of the Indiana State Chamber of Commerce, and past chairman of the board, will continue to serve the organization in an advisory capacity as assistant to the president. John W. Barriger, president of the Monon, was named to fill a vacancy on the board caused by the resignation of J. S. Jarrett.

The board announced that the society's second annual traffic and transportation conference will be held in cooperation with the University of Pittsburgh, at Pittsburgh, probably in September 1952. The first such conference, at Chicago, was described by *Railway Age* on September 24.

The society will conduct its next examinations December 6 and 7, at 30 established centers at educational institutions throughout the United States. The centers include New York, Chicago, Philadelphia, Washington, Baltimore, Los Angeles, San Francisco, Portland, Ore., Detroit, Cincinnati,



Walter A. Lucas photos

ANOTHER CENTENARIAN!—On October 1, 1851, the 22-ton locomotive "New York" pulled into East Albany (now Rensselaer), N. Y., with the first through train from New York City, to inaugurate service over the Hudson River Railroad, one of the earliest units in the present New York Central System. The monument shown above was unveiled at Rensselaer (below) on September 29, to commemorate the event

Cleveland, St. Louis, Minneapolis, Richmond, Va., Indianapolis, Albany, N. Y., and Roanoke, Va. Centers also will be established at other convenient locations if application is made by registrants. Registrations must be in the hands of the Registrar, P. O. Box 2128, Middle City Station, Philadelphia 3, Pa., by November 10.

R.B.A. Dinner November 16

The 43rd annual dinner of the Railway Business Association will be held in the Stevens Hotel, Chicago, on November 16. Laurence F. Whittemore, former president of the New York, New Haven & Hartford, who is now president of the Brown Company, Berlin, N. H., will be the principal speaker. Attendance is expected to reach 900.

The **American Railway Magazine Editors Association** will hold its 29th annual meeting at the Greenbrier, White Sulphur Springs, W. Va., on November 1, 2 and 3. Highlights of the meeting will include a panel of railway labor publication editors who will discuss projects in which their publications have cooperated with management for the mutual good of the industry and a "workshop" session to bring out new ideas and innovations that have been put into practice during the past year. Grove Patterson, editor-in-chief of the Toledo Blade, will be the principal speaker at the banquet on November 2. Robert M. Van Sant, director of public relations of the Baltimore & Ohio, will keynote the opening day of the meeting. Thomas J. Deegan, vice-president—passenger traffic and public relations, of the Chesapeake & Ohio, also will address the editors. The A.R.M.E.A. is the oldest organization of industrial editors in the world; it has been estimated that through their various "house organs," its members reach an audience of almost 4,000,000 railroad readers.

The **Railway Business Women's Association of Chicago** will meet for a Halloween party on October 30 at the Swedish Club, 624 Wrightwood Avenue.

Warren W. Brown, vice-president—traffic of the Monon, will address the **Volunteer Supply Corps Unit 9-7 Reserve,** U.S. Navy, at the Naval Armory, Chicago, on the evening of November 8. Two films, "Thundering Rails," and the Monon's latest, "The Hoosier Line," will be shown.

The 16th anniversary convocation of the **Drexel Institute of Technology** will be held on October 30, 31 and November 1. Brig. Gen. Charles D. Young, retired vice-president of the Pennsylvania, will serve as chairman at a panel discussion on "Transportation—Vehicle for Defense Production" to be held on November 1, at 2:30 p.m. in the Red Room of the Bellevue-Stratford Hotel at Philadelphia. Panel members will be Major General Frank A. Heileman, chief of transportation, Department of the Army; Edgar S. Idol, general counsel, American Trucking Associations, Inc.; Col. J. Monroe Johnson, member, Interstate Commerce Commission; Dr. Julius H. Parmelee, vice-president, Association of American Railroads; and Hon. Delos W. Rentzel, under secretary of commerce for transportation, U. S. Department of Commerce.

OVERSEAS

Gold Coast.—Opportunities reportedly exist here to sell machinery for manufacturing railroad ties, according to a recent issue of Foreign Commerce Weekly. The country's new development plans include extension of railroads and it is estimated the Railway Administration will need at least 200,000 additional standard ties (5 in. by 10 in. by 7 ft.) annually for not less than 10 years, plus a limited number of larger ties. Although local saw mills are expected to be able to supply the demand, special machinery will have to be imported. A list of business firms in the Gold Coast, which includes saw mills, is obtainable from the Commercial Intelligence Division, U. S. Department of Commerce, Washington 25, D. C., at $1 per copy.

SUPPLY TRADE

D. C. Prescott, formerly St. Louis district manager of locomotive sales for **Fairbanks, Morse & Co.,** has

D. C. Prescott

been promoted to middle western regional sales manager. With headquarters at Chicago, his new territory will include St. Paul, Minneapolis and St. Louis. Mr. Prescott was with the Baldwin-Lima-Hamilton Corporation and the Union Pacific before he joined Fairbanks, Morse in 1949.

E. L. Ruggles, formerly assistant general manager of the **Bird-Archer Co.,** has been appointed vice-president and general manager, with headquarters at Cobourg, Ont., to succeed **J. C. Hutton,** who recently retired as vice-president. Mr. Ruggles was born in Regina, Sask., and was gradu-

E. L. Ruggles

ated from the University of Saskatchewan in civil engineering in 1935. He joined Bird-Archer in 1937 as service engineer in the railway department, in western Canada. In 1943 he was appointed district manager for western Canada and, in 1946, assistant general manager, with headquarters at Montreal.

N. H. Arnold has been appointed sales manager for the **Standard Railway Equipment Manufacturing Company.** He will be in charge of development, manufacture and sales of Standard's wheel-truing machine.

The **American Locomotive Company** has announced the following appointments: **Paul N. Strobell,** formerly eastern district manager for Alco-GE locomotive sales and field service, as assistant to **W. A. Callison,** vice-president of eastern regional sales, with headquarters at New York; **Ralph M. Darrin, Jr.,** to succeed Mr. Strobell at Schenectady, N. Y.; **Frederick Townsend** as assistant manager, Alco-GE locomotive sales and field service for field service, with headquarters at Schenectady, and **Richard B. Fairman** as regional renewal parts manager, eastern section, northeast regional renewal parts office, also at Schenectady.

William A. Uline, formerly assistant divisional sales manager for the Scintilla magneto division of **Bendix Aviation Corporation,** at Sidney, N. Y., has been appointed industrial

sales manager as a result of the organization of separate aviation and industrial sales departments for the division. Mr. Uline's new duties will cover full responsibility for sales of all non-aeronautical products, including electrical connectors.

Adger S. Johnson, formerly vice-president and general manager of the **National Carbon Company,** a division of the **Union Carbide & Carbon Corp.,** has been appointed president. Mr. Johnson was born in Charleston, S. C. In 1928 he was graduated from the Virginia Polytechnic Institute with a degree in chemical engineering and in the same year joined National Carbon. He was assigned to the company's Eveready battery plant in Shanghai, China, in 1933 and was appointed superintendent of the plant in 1939. In the latter year, he was recalled to the United States and worked as superintendent at several National Carbon plants. He was appointed assistant to the vice-president in charge of production in 1944, vice-president in charge of foreign plants in 1948, and vice-president and general manager in 1950.

Adger S. Johnson

Constant C. Hopkins, owner of the **Constant Hopkins Company,** has been elected vice-president of **Dednox, Inc. Michael W. Neal,** who has been head of the Dednox service department, has been appointed sales engineer. Together they will collaborate with the **Spring Packing Corporation,** exclusive distributor of Dednox to railroads. Mr. Hopkins has been associated with the sale of Dednox since its inception.

A multi-million dollar expansion of facilities of the **Granite City Steel Company** to increase output of flat rolled products is under way at Granite City, Ill. The overall expansion will include construction of three new open hearth furnaces, three new slab heating furnaces, a blooming mill and modification of the present strip mill.

EQUIPMENT AND SUPPLIES

The **Chicago, Burlington & Quincy** has ordered from its own shops 2,500 50-ton box cars and 750 70-ton hopper cars for its 1952 equipment program. The total cost of the program is estimated at $16,000,000. Production and delivery of the cars is contingent on availability of materials.

The **Fruit Growers Express Company** is considering purchase of 1,000 50-ton refrigerator cars.

The **Louisville & Nashville** has not ordered 250 50-ton box cars, as erroneously reported in *Railway Age* of October 15, page 114.

LOCOMOTIVES

Locomotive Orders Placed In September Set Record

Class I railroads in September placed orders for more new locomotives than in any month on record, according to the Association of American Railroads. The roads ordered 459 locomotives, including 444 diesel-electrics and 15 steam.

September orders increased the backlog of new locomotives on order to 1,827 as of October 1, the A.A.R. said. On the same date last year the backlog was 1,439. Of those on order October 1 this year, 1,802 were diesel-electric, 23 steam, and two electric.

Class I roads installed 1,856 new locomotives during the first nine months this year. This number included 1,840 diesel-electric, 14 steam, and two electric locomotives. During the like nine-month period of 1950 the roads installed 1,693 locomotives, of which 1,681 were diesel-electric, eight steam, and four electric.

In September this year, 209 new locomotives were installed, all of which were diesel-electrics except for two steam locomotives.

The **Great Northern** has received authority from its board of directors to purchase 26 new diesel locomotives, comprising 47 units, at a total cost of $8,150,000. The units authorized include 15 1,500-hp. road-switchers, two 3,000-hp. road passenger, seven 4,500-hp. road freight, one 3,000-hp. for freight and one 6,400-hp. road freight locomotive.

The **Norfolk & Western** has ordered 15 0-8-0 steam switching locomotives from its Roanoke shops. Delivery of the locomotives, which will cost approximately $1,500,000, is scheduled to begin in the second quarter of 1952.

The **Southern** has ordered 100 additional diesel-electric locomotive units at an estimated cost of $16,500,000. Delivery is expected during 1952. Orders were placed with the American Locomotive Company, the Electro-Motive Division of General Motors Corporation, and the Baldwin-Lima-Hamilton Corporation.

SIGNALING

The **Reading** has ordered from the General Railway Signal Company equipment for installation of six remotely controlled relay interlockings. The control machine, to be located at Neshaminy Falls, Pa., will have 39 track lights and 31 levers to control 9 switch machines, 10 switch locks, 19 signals and other functions to be installed at a later date. Included in this order are types B and K relays, type G color-light signals, and model 5C switch machines.

The **Union Pacific** has ordered from the Union Switch & Signal division of Westinghouse Air Brake Company material to install new signaling on 28 miles of single track between Reith, Ore., and Hinkle, including a remote layout at Hinkle, which will be controlled from the existing machine at La Grande, Ore., 106 miles distant. In addition to material required to add controls to the existing machine, the order includes styles H-2 and P-5 signals, M-23A dual-control electric switch machines, MC-1 motor car indicators, code and carrier equipment, relays, rectifiers, transformers and housings. Field installations will be handled by railroad forces.

IRON & STEEL

The **New York Central System** has ordered rail joint bars and 111,500 net tons of steel rail at an approximate cost of $8,920,000. Orders were placed with the United States Steel Company, the Bethlehem Steel Company, the Inland Steel Company and the Algoma Steel Corporation. The rail, for 1952 delivery, will be of 105-lb., 112-lb., 127-lb. and 132-lb. weights.

CAR SERVICE

An embargo on virtually all freight consigned for export and coastal shipping through New York harbor, including Port Newark, was issued by the Association of American Railroads on October 22 because of the strike of longshoremen. On October 23, the embargo was extended to Boston, Mass. In making the announcement, Chairman A. H. Gass of the Car Service Division said that the Association's action was necessary to prevent a back-up of freight cars which could not be unloaded at the ports.

Exception provisions, as summarized

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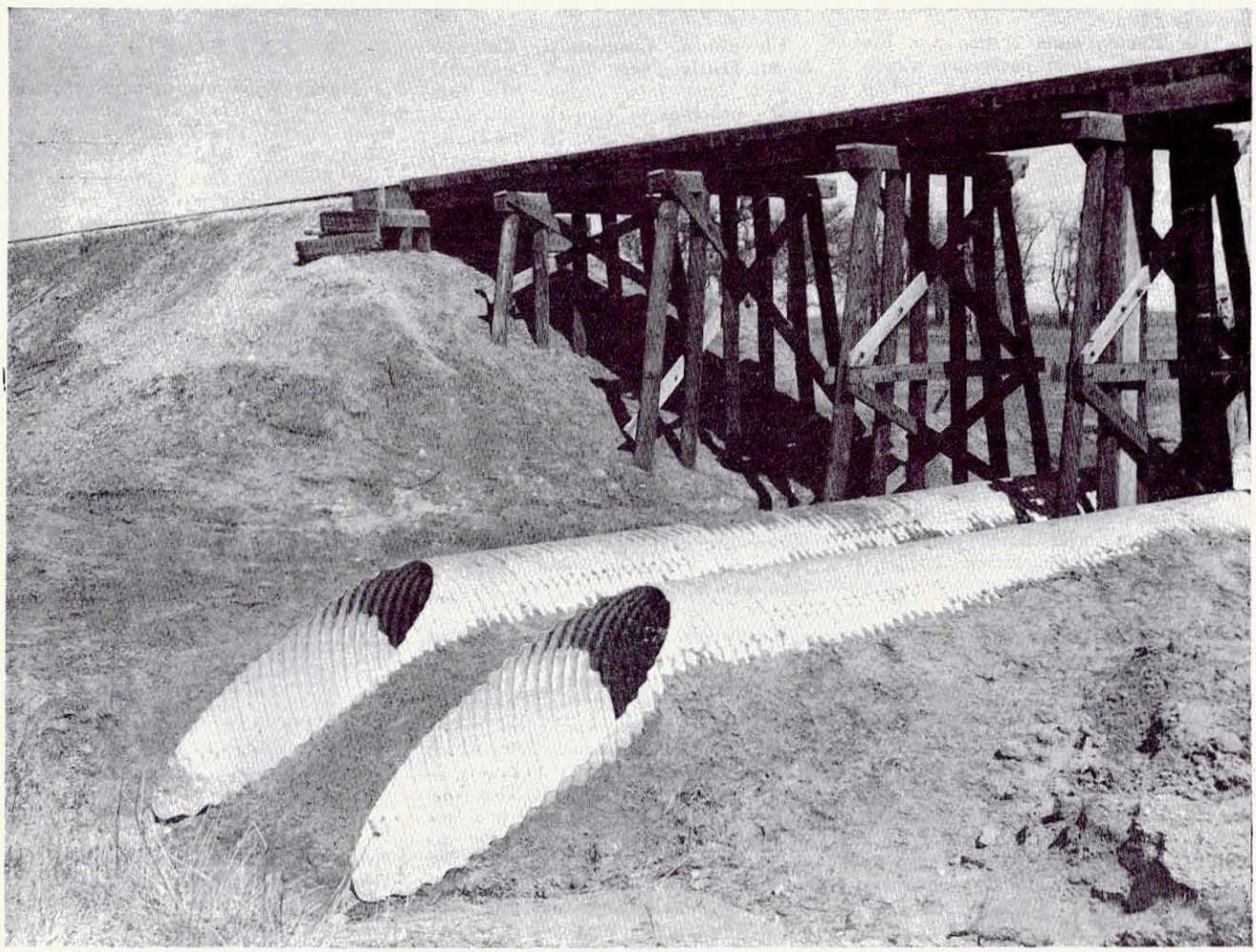


For additional information, use postcard on pages 63, 64

by Mr. Gass, exempt "freight consigned to all branches of the armed forces; grain, soybeans, flaxseed, malt and rice in bulk when permits have been issued by operators of elevators into which this freight is to be unloaded; freight for delivery to steamship lines when covered by permits issued by the railroads serving the port area; and other freight for unloading into storage within the port area when storage facilities are assured."

CONSTRUCTION

Pennsylvania.—New diesel facilities will be built at Pitcairn, Pa., at a cost of nearly $1,000,000, J. A. Appleton, vice-president of this road, has announced. Mr. Appleton also revealed that new stokers have been installed in the power plant adjoining the station in Pittsburgh. The new diesel facilities, to be built west of the enginehouse at Pitcairn, will include a 94-ft. by 346-ft. building, two locomotive pits, a machine shop, store and locker rooms, cleaning machine and dryer, and installation of cranes. The facilities are to be used to service and maintain the road's diesels in Allegheny county.

"The Pennsylvania system now has in service 77 road passenger diesels and 172 road freight diesels and is performing 79 per cent of its passenger service and 56 per cent of its freight service by either electric or diesel locomotives," Mr. Appleton said. "When all switchers now on order are received, 76 per cent of switching service will be handled by these types of locomotives. Of course, in Allegheny county our percentage of diesel switching locomotives will be higher. Deliveries began this summer on the Pennsylvania's latest order for 132 additional road passenger, road freight, road switching and yard switching diesels. [*Railway Age*, June 4, page 84.] By the end of this year it is expected that 10 road locomotives and 25 switchers of this order will be in service. When the order is filled, the Pennsylvania will have 1,168 diesel locomotives generating 2,314,170 horsepower."

FINANCIAL

Atlantic & East Carolina.—*Lease.*—This road seeks to amend its lease agreement with the Atlantic & North Carolina so as to increase annual rental payments to the latter road, according to an application filed with the I.C.C. The amended agreement would be retroactive to January 1. The A&N.C. is operated by the A.&E.C. but is owned principally by the state of North Carolina. It has been authorized a $500,000 loan by the legislature. The money is scheduled for use in replacing 60-lb. rail with 85-lb. rail, rehabilitating a bridge at New Bern, N.C., and purchasing "one and possibly two diesel-electric locomotives." The increased rental payments by A.&E.C. will serve to pay off this advance from the state government. The A.&N.C. filed a separate application with the I.C.C., seeking permission to issue notes or bonds in connection with the advance of funds from the state.

Chicago & North Western.—*Trackage Rights.*—Division 4 of the I.C.C. has authorized this road to acquire trackage rights, covering operation of its "Dakota 400" passenger trains, over the Chicago, St. Paul, Minneapolis & Omaha between Wyeville, Wis., and Elroy, 22.7 miles. The trackage-rights contract was executed in July of this year, but is retroactive to April 26, 1950. Under the agreement the C.&N.W. will operate eastbound train No. 518 over the Omaha trackage regularly, but westbound No. 519 only in emergencies. The C.&N.W. will pay $1.34 per train-mile, or $30.82 for each movement over the line.

Cleveland, Cincinnati, Chicago & St. Louis (New York Central).—*New Line into Joppa, Ill.*—This road's proposal to construct an 11.2-mile line from Karnak, Ill., to Joppa has received support from general committees of four rail unions on the road. The committees have been authorized by the I.C.C. to intervene in support of the N.Y.C. The Chicago & Eastern Illinois is opposing the proposed construction on grounds that it already provides adequate rail service at Joppa, and union committees on that road have been authorized to intervene in support of C.&E.I.'s position. (*Railway Age*, October 8, page 67.) The committees supporting the N.Y.C. are the General Committee of Adjustment of the Brotherhood of Locomotive Engineers, and the General Grievance Committees of the Locomotive Firemen & Enginemen, Railroad Trainmen, and Railway Conductors.

Tennessee Railroad.—*Extension of Bonds.*—This road has applied to the I.C.C. for authority to extend the maturity date of its first mortgage bonds. No change would be made, other than in the maturity date, which would be extended from February 2, 1952, to February 2, 1967. The road said holders of more than 99 per cent of the bonds have agreed to the extension. Extension of the bonds is necessary, the road said, because it would be unable to pay off the bonds when they mature next year.

New Securities

Division 4 of the I.C.C. has **authorized:**

LOUISVILLE & NASHVILLE.—To assume liability for $7,800,000 of series K equipment trust certificates, to finance in part 47 diesel-electric locomotives and 400 freight cars costing an estimated $9,751,609. (*Railway Age*, October 1, page 144.) Division 4 approved sale of the certificates at 99.691 with interest at 2¾ per cent—the bid of Salomon Bros. & Hutzler and three associates—which will make the average annual cost of the proceeds approximately 2.82 per cent. The certificates, to be dated September 15, will mature in 15 annual installmentst of $520,000 each, beginning September 15, 1952. The certificates were reoffered to the public at prices yielding from 2.125 to 2.85 per cent, according to maturity.

Dividends Declared

ATLANTIC COAST LINE.—$1.25, payable December 12 to holders of record November 14.

LOUISVILLE & NASHVILLE.—$1, quarterly, payable December 12 to holders of record November 1.

RICHMOND, FREDERICKSBURG & POTOMAC.—7% guaranteed preferred, 87½c, semiannual; 6% guaranteed preferred, 75c, semiannual, both payable November 1 to holders of record October 31.

Security Price Averages

	Oct. 23	Prev. Week	Last Year
Average price of 20 representative railway stocks	54.66	57.00	49.07
Average price of 20 representative railway bonds	92.25	92.90	95.10

RAILWAY OFFICERS

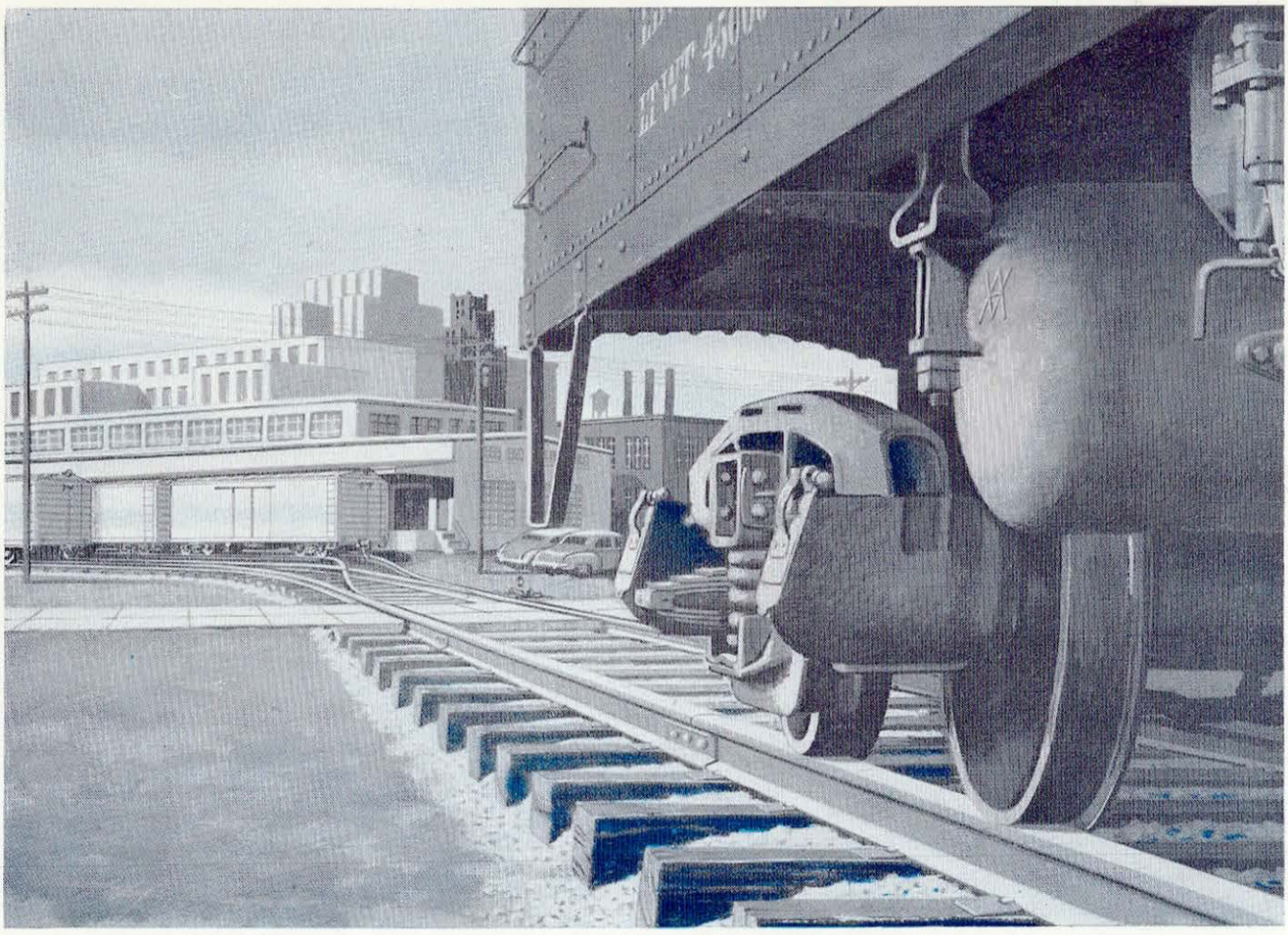
EXECUTIVE

Harry W. Watson, auditor of the Chicago & Illinois Midland, has been elected vice-president in charge of operations, a newly created position (*Railway Age*, October 15). Mr. Watson entered railroad service in 1907 as call boy on the Burlington, later becoming yard clerk, roundhouse clerk, fuel clerk and shop timekeeper. In 1912 he became statistician for the Chicago, Peoria & St. Louis (now divided between the C.&I.M. and other

Harry W. Watson

roads) and in 1915 became traveling freight inspector for the same road, entering the Army in 1917. He re-

(Continued on page 59)



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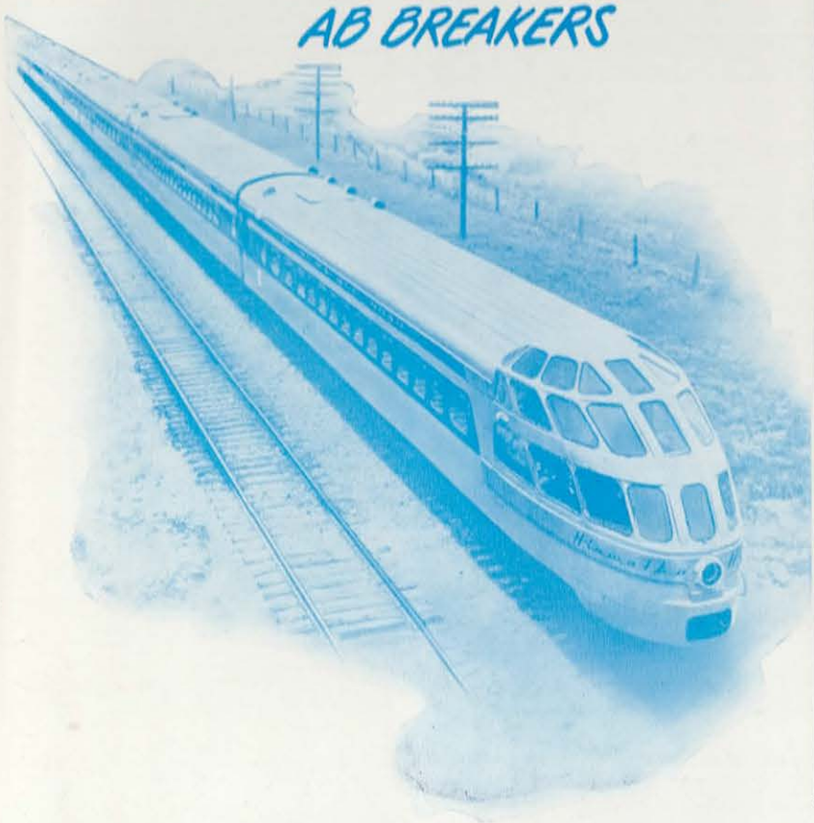

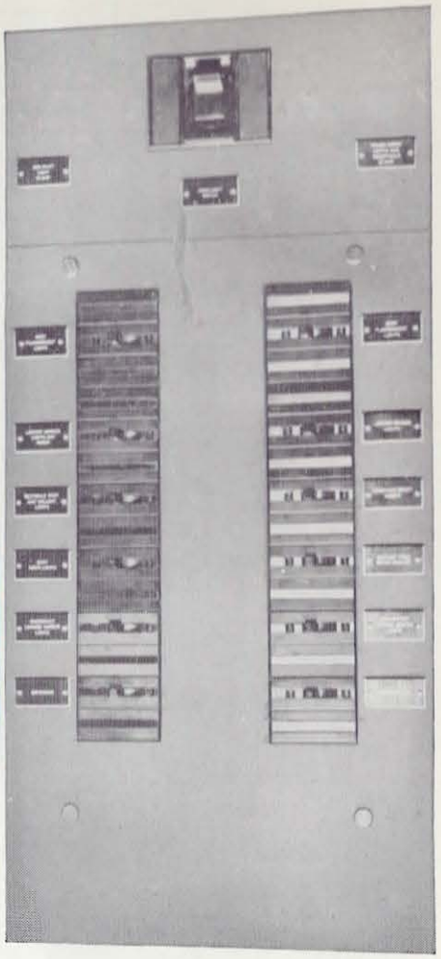

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WESTINGHOUSE

(*Continued from page* 54)

sumed employment with the C. P. & St. L. in 1919 and became general clerk in the auditor's office in 1920. His subsequent career has been with the C. & I. M., starting as senior valuation clerk in 1926. In 1938, he was named chief clerk, accounting department. He was appointed assistant auditor in 1944, and auditor of the line in 1948.

FINANCIAL, LEGAL & ACCOUNTING

Walter F. Pregge, auditor of the LOUISIANA & ARKANSAS, a subsidiary of the KANSAS CITY SOUTHERN, has been appointed comptroller to head the accounting departments of both lines, with headquarters in Kansas City, Mo. (*Railway Age,* October 15). Mr. Pregge began his railroad service in 1906 in the mechanical department of the St. Louis Southwestern at Tex-

Walter F. Pregge

arkana, Tex. In 1909 he went with the original Louisiana & Arkansas as a clerk in the accounting department at Texarkana and was appointed assistant auditor in 1922. In 1929, when the present L. & A. was formed by a merger with the Louisiana Railway & Navigation Co., his headquarters were moved to Shreveport, La. Mr. Pregge has been auditor since 1935.

William F. Paden, adjuster in the freight claim department of the WESTERN PACIFIC, has been appointed assistant claim agent, with headquarters at Chicago.

OPERATING

Roy H. Seidel, office manager in the general manager's office of the READING, has been appointed assistant to the general manager, with headquarters as before at Reading, Pa.

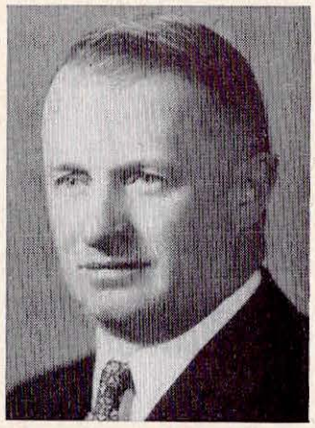
Harold J. Mulford, trainmaster of the SACRAMENTO NORTHERN, has been appointed acting superintendent, succeeding **Stacy S. Long,** retired.

Thomas H. Martin, general traffic manager of the express department of the CANADIAN NATIONAL, has been appointed general manager of that department, with headquarters as before at Montreal, succeeding **Forrest N. Wiggins,** who has retired on pension after 50 years of railway service. Mr. Martin was born at Hamilton, Ont., on March 27, 1900, and joined the Canadian Northern Express (now Canadian National Express) in 1917

Thomas H. Martin

as clerk, subsequently becoming chief clerk and traffic clerk in the office of the general manager. He was appointed superintendent of traffic and transportation in 1938, traffic manager in 1942, general superintendent of traffic and transportation in 1945, and general traffic manager in 1950.

Mr. Wiggins was born at Malakoff, Ont., on October 8, 1886, and joined the Canadian Express Company in



Forrest N. Wiggins

1901 as driver and clerk at Parry Sound, Ont. Six years later he entered the service of the Canadian Northern Express as clerk at Winnipeg. In 1911 Mr. Wiggins became superintendent of the Canadian Northern at Toronto and in 1921 was appointed general superintendent of the newly-formed Canadian National Express at Moncton, N. B., transferring to Montreal in 1924. He became general manager in 1948.

D. J. Burke has been appointed trainmaster of the Little Rock — Louisiana divisions of the MISSOURI PACIFIC at Ferriday, La. He succeeds **J. C. King,** who is retiring after 48 years of service.

Sidney M. Rodgers has been appointed general manager of operating, mechanical and maintenance departments of the RUTLAND at Rutland, Vt., a newly created post. Mr. Rodgers, a graduate of Princeton University, entered railroad service in 1934 with the Pennsylvania, after graduate study at the Yale University School of Transportation. He served the Pennsylvania as division engineer of the Eastern region at Williamsport, Pa., and of the Western region at Toledo. During the past year Mr. Rodgers

Sidney M. Rodgers

has been assistant engineer in the office of the chief engineer, maintenance of way, the Pennsylvania at Philadelphia. In 1946 he had a special duty assignment in the P.R.R.'s main accounting office to make a detailed study of methods and procedures of accounting in audits of disbursements and passenger and freight traffic. Concurrently he worked in the comptroller's office preparing estimates and budgets.

TRAFFIC

G. Wehnert, general freight agent for the CHICAGO & ILLINOIS MIDLAND, at Springfield, Ill., has been appointed freight traffic manager. He is succeeded by **F. W. Paris,** former assistant general freight agent. **J. D. Means,** assistant to general freight agent, has been appointed assistant general freight agent, succeeding Mr. Paris. **F. A. Jones** has been appointed to succeed Mr. Means.

Charles E. King, assistant general freight agent of the ERIE at Pittsburgh, will retire on October 31, af-

ter more than 42 years of service. **Hawley B. Rogers,** general livestock and agricultural agent at Buffalo, will retire on October 31, after more than 31 years of service.

D. J. Butler, district freight agent of the PENNSYLVANIA at Milwaukee, has been promoted to division freight agent at Erie, Pa., succeeding **Charles C. Kelsey,** who has been transferred to Cleveland to replace **William H. Hardt II.** Mr. Hardt has been transferred to Baltimore to replace **D. J. Moynihan,** who has been transferred to Buffalo to succeed **George Berg,** retired. **Robert M. Tillotson,** chief clerk to the division freight agent at Erie, has been appointed district freight agent at Elmira, N. Y., succeeding **C. E. Williams,** who moves to New Orleans in a similar capacity. **Howard L. Gordon,** district freight agent at Philadelphia, has been transferred to Des Moines, Iowa, succeeding **Maurice Lyall,** who has been transferred to Philadelphia as district freight agent on special duty. **William D. Gordon,** district freight agent at Chicago, has been appointed division freight agent at Grand Rapids, Mich., succeeding **Thomas A. McMillen,** who is retiring after 46 years of service. **Oren B. Peterson,** district freight and passenger agent at New Orleans, succeeds Mr. Gordon at Chicago. **Harry H. Ramsay,** chief rate clerk in the general freight office at Pittsburgh, has been appointed district freight agent at Kansas City, succeeding **Leo H. Dickman,** who has been transferred to Milwaukee to replace Mr. Butler.

W. J. Whitaker, division freight and passenger agent of the MISSOURI PACIFIC at Poplar Bluff, Mo., has been appointed general agent at Birmingham, Ala., succeeding **P. B. Dudek,** whose promotion to assistant merchandise traffic manager was announced in *Railway Age* October 8. Mr. Whitaker is succeeded at Poplar Bluff by **T. B. Arnold.**

John M. Gehbauer has been appointed division freight agent of the WABASH at St. Louis, succeeding **J. H. Wack,** retired after 45 years of service.

L. F. Binkley, whose recent promotion as general freight agent of the MISSOURI PACIFIC, at St. Louis, was noted in *Railway Age* September 10, started his railroad career with the Missouri & North Arkansas (later a part of the now-defunct Missouri & Kansas), in September 1912, and came to the M.P. as a rate clerk in the local freight office at Kansas City in 1917. He entered the traffic department in 1924, and served as a clerk at Kansas City; traveling freight agent at Atchison, Kan., and general agent at Sioux City, Iowa, and Chicago. He was transferred to Omaha in 1940 as assistant general freight agent, and held this position until his recent promotion.

ENGINEERING AND SIGNALING

A. C. Krout, signal supervisor for the SOUTHERN PACIFIC at Los Angeles, has been appointed assistant signal engineer at San Francisco, succeeding **D. W. Dower,** retired after 46 years of service. **H. E. Stansbury,** assistant engineer, retired on September 30.

R. A. Hendrie, assistant superintendent of telegraph for the MISSOURI PACIFIC, at St. Louis, has been appointed general superintendent communications at the same point, succeeding **Worth Rogers,** whose retirement was reported in *Railway Age* October 8. Mr. Hendrie entered railroad service in 1906 as telegraph oper-

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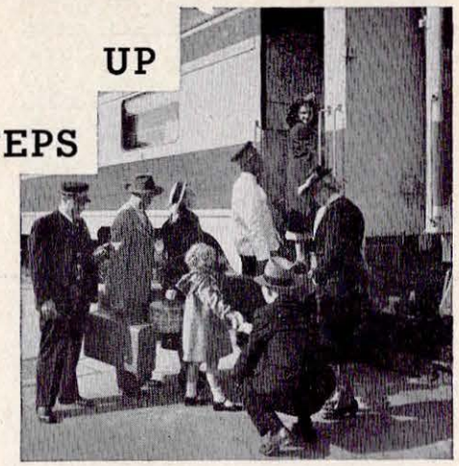

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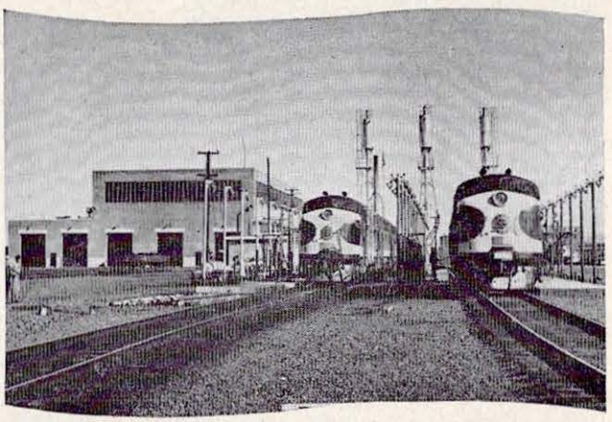

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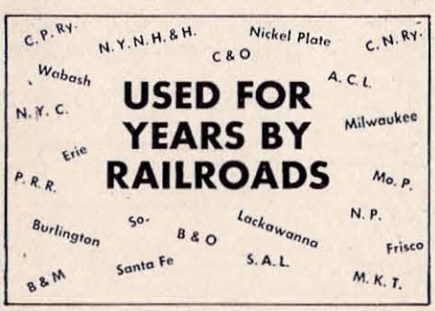

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ator for the Louisville & Nashville, and was telegraph operator for several other roads until 1912, when he became manager—wire chief for the Missouri-Kansas-Texas. In 1915 he was named telegraph inspector, and in 1918 telephone engineer for the same road. He began working for the M.P. in 1928 as telegraph and telephone engineer, becoming assistant superintendent of telegraph in 1939.

J. R. Leguenec, building and bridge supervisor for the ST. LOUIS SOUTHWESTERN, has been appointed division engineer, with headquarters as before at Tyler, Tex. Mr. Leguenec succeeds **J. F. Montgomery,** who has retired after more than 31 years of service.

L. E. Verbarg, electronics engineer on the MISSOURI PACIFIC, at St. Louis, has been appointed superintendent communications, succeeding **R. A. Hendrie. H. C. Macomber** succeeds Mr. Verbarg at St. Louis.

MECHANICAL

John C. Stump, whose appointment as chief mechanical officer of the CHICAGO & NORTH WESTERN was announced by *Railway Age* on October 8, began his railroad career with the C. & N. W. in 1912 as a machinist at Eagle Grove, Iowa. He later served in various supervisory positions at Chadron, Neb., Green Bay, Wis., and New Butler. In 1926 he was appointed assistant superintendent of motive power and machinery at Chicago; in 1939, superintendent of motive power, Western district; in 1944, superintendent of motive power, Northern district, and in 1948, assistant chief mechanical officer.

John C. Stump

The appointment of **George R. Andersen** as assistant chief mechanical officer (*Railway Age*, October 8) follows a long career with the C. & N. W. He started in 1911 as a car inspector at Milwaukee, later serving as chief car inspector and assistant car foreman. In 1920 he was made general car foreman at Butler, Wis.; and, in 1921, assistant master car builder at Chicago, becoming master car builder in 1925. He was appointed assistant superintendent car department in 1942, and in 1945 became superintendent car department at Chicago.

George R. Andersen

Walter C. Barrer's appointment as superintendent car department (*Railway Age*, October 8) follows a railroad career which also began as a car inspector on the C. & N. W., in 1915. After military service in World War I, he returned to the railroad in 1919 as a car inspector and held various positions, becoming assistant foreman, Chicago shops, in 1925. In 1942 he was appointed general foreman at the California Avenue shop; in 1944, district superintendent car maintenance, and, in 1945, assistant superintendent, car shops.

Walter C. Barrer

T. J. Lyon, superintendent of equipment (Buffalo and East) for the NEW YORK CENTRAL, with headquarters in New York City, has been appointed assistant superintendent of equipment, (West of Buffalo), with headquarters at Chicago. He has also been appointed superintendent of equipment for the INDIANA HARBOR

(*Continued on page* 66)

LITERATURE and PAMPHLETS Offered by Railway Age Advertisers

Following is a compilation of free literature, pamphlets and data sheets offered by advertisers in the five October issues of *Railway Age* (and recent manufacturers' announcements). To receive the additional literature desired, merely circle the item number(s) on the card below.

513. Filter Cartridge
Briggs Filtration Company. Descriptive folder illustrates the new Briggs "Dirt Hog" Oil Filter Cartridge for diesel engines.

514. Vane Type Electric Contact Controllers
Minneapolis-Honeywell Regulator Co. 16 page catalog #8000, illustrates and describes vane type electric contact control units as used with M-H thermometers, pressure gauges, and millivoltmeters to give snap-action on-off, two position or three position control.

515. Circuit Breaker
Westinghouse Electric Corp. Bulletin B-4081 gives complete information on Westinghouse circuit breakers.

516. Braided Slings
Bethlehem Steel Company. Free catalog gives complete information on Bethlehem braided slings for lifting and moving.

517. Rust Preventative
Rust-Oleum Corporation. New catalog describes rust preventive for rolling stock, metal buildings, bridges, signal equipment.

518. Paper Cups
United States Envelope Co. Full particulars on putting U.S. Envelope water cup services in cabs and cabooses.

519. Railroad Cleaning
Oakite Products, Inc. 56-page booklet "Railroad Cleaning" describes Oakite's knowledge of the problems associated with railroad maintenance, overhaul and repair. *For railway personnel only.*

520. Vinylite Passenger Car Flooring
Bakelite Co. div. of Union Carbide & Carbon Corp. Complete story on "Terraflex" passenger car flooring made of Vinylite Brand Resins.

521. Carbon Paper
Standard Manifold Company. Complete information available on the Repeat-O-Pak floating carbon paper for way bills, expense forms, etc.

522. Steel
Bethlehem Steel Company. Catalog No. 259 describes Bethlehem's Mayari R low-alloy, high strength steel.

523. Freight Car Flooring
Armco Steel Corporation. Informative booklet "Armco Freight Car Flooring" gives more information on this versatile flooring.

524. Storage Batteries
Gould-National Batteries, Inc. Booklet on complete Gould Plus-Performance Plan shows how to conserve and extend battery power.

525. Cleaners
Dearborn Chemical Company. Complete information on the Dearborn line of cleaners for every railroad need.

526. Metal Railway Accessories & Car Parts
Morton Manufacturing Co. Costs and specification sheets available on steel flooring, hollow metal doors, running boards and brake step, safety tread, vestibule weather-seal, vestibule curtains and diaphragms. *Please specify.*

527. Freight Cars
General American-Evans Company. New book, "Operations Manual for Railroads and Shippers", illustrates and describes best methods of loading and unloading cars swiftly and safely.

528. Non-Spin Wheel Hand Brake
Union Asbestos & Rubber Co. Literature available on the Type 3750-A Equipco Non-Spin Wheel Hand Brake.

529. Fork Trucks
Clark Equipment Co. Information on Clark attachments and fork-lift trucks in condensed catalog and material handling news. *Please specify.*

530. Fork Lift Trucks
Towmotor Corp. Information available describing the new Towmotors. Also, film "What Makes It Tick" for personal viewing. *Please specify.*

531. Power Industrial Trucks
Elwell-Parker Electric Co. New general catalog describes the complete E-P line of power industrial trucks.

532. Industrial Truck Maintenance
Baker Industrial Truck Div. Baker-Raulang Co. New 16-page picture-story manual "Care and Maintenance of Industrial Trucks."

533. Air Dump Car
Differential Steel Car Co. Bulletin RA-5 describes the air dump cars by Differential that dump in two directions.

534. Air Horns
Leslie Company. Literature and quotations available on the new Leslie Supertyfon chime-horns.

535. Steel Rolling Doors
The Kinnear Mfg. Co. Complete data on steel rolling doors available in the new Kinnear Rolling Door Catalog.

(Continued first column reverse side)

Additional Product Information

This is a complete list of products mentioned in the advertisements in this issue. For more data on any product shown, circle the page number(s) on the reply cards below, fill in and mail. *Note:* If the advertiser mentions more than one product, or if more than one ad appears on the page, *write in* the name of the product you are interested in.

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First Class Permit No. 153 (Sec. 34.9, P.L.&R.), New York, N.Y.

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30 Church Street

Reader Service Dept. **New York 7, New York**

RAILWAY AGE October 29, 1951

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On pages....., I want data on .....only!
product (s)

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Company .....

Address .....

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LITERATURE & PAMPHLETS

536. Rubber-Tired Off-Track Switcher
The Frank G. Hough Company. Job Study #18 is a complete picture-and-word report on the uses of Payloader Switchers by a large brewery.

537. Waste-Container & Retainer
Hulson Company. New 24-page booklet describes the use and illustrates the Hulson Flex-Pak synthetic rubber waste-container and retainer as it fits in standard A.A.R. journal boxes.

538. Vibrator Converter
Cornell-Dubilier Electric Corp. Complete technical data on the Cornell-Dubilier vibrator converter as used in radio communication.

539. Freight Car Repair Service
Chicago Freight Car & Parts Co. Complete information on the Chicago Freight Car repairing and rebuilding services.

540. "How You Can Make America Strong"
Texas and Pacific Railway Co. Reprints of new series of T & P ads (October 1 RAILWAY AGE). Also, the article "The Four Pillars of Freedom—Work, Save, Vote and Pray." *Please specify.*

541. Portable Hot Blast Heater
Western Metal Specialty Co. Complete details and low unit prices available on the Western Portable Hot Blast Heater

542. Chilled Car Wheels
Association of Manufacturers of Chilled Car Wheels. Descriptive booklet "Gentlemen of the Jury" gives data on AMCCW chilled car wheels.

543. Journal Box Visualizer
Hyatt Bearings Div. General Motors Corp. Simple plastic journal box visualizer shows ease of maintenance of Hyatt journal boxes.

544. Petroleum Products
Standard Oil Company of California. Additional information on the RPM Delo Oil R.R. or any other petroleum product.

545. Solid Journal Bearings
Magnus Metal Corp. Booklet "Facts" gives information regarding the A.A.R. solid journal bearings.

546. Car Heating System
Minneapolis-Honeywell Regulator Co. Full information on benefits derived through use of Honeywell Car Heating System.

547. Vanadium Steel For Welding
Vanadium Corporation of America. Data sheet gives complete details of composition, etc., of Vanadium Steels for welding.

548. Electronic Scale
Streeter-Amet Company. Brochure explains construction, maintenance and installation of the new Ametron Electronic Scale.

549. Torque-Control Crane
Orton Crane and Shovel Co. Catalog #83 describes and pictures the Orton Torque-Control Crane with GM Allison Torque Converter.

550. Asphalt — Asbestos — Magnesia — Products & Specifications
The Philip Carey Mfg. Company. Carey Reference Manual for Asphalt, Asbestos and Magnesia Products, lists products and specifications.

551. Recorders
Barco Manufacturing Co. New bulletin "Barco Recorders for Diesel, Steam, and Electric Locomotives in Passenger, Freight and Shipping Service."

552. Automatic End Door Operators
National Pneumatic Co., Inc. Publication No. 1063 gives complete information on NP Automatic End Door Operators.

553. Pins and Bushings
Ex-Cello-O Corporation. Bulletin 32381 describes standard styles and sizes of Ex-Cello-O pins and bushings.

554. Dictating Machine
Thomas A. Edison, Inc. New descriptive booklet, "Line on Televoice" describes the Televoicewriter — the new dictating instrument.

555. Rubber-Cushioned Draft Gears
National Malleable and Steel Castings Co. Circular No. 5047 gives data on the Type M-380 Rubber-Cushioned draft gear.

556. Fire Prevention Equipment
C-O-Two Fire Equipment Company. Complete free information on the C-O-Two line of fire protection equipment.

557. "Syncrostep" For Coded Remote Control
General Railway Signal Company. Pamphlet #716 describes new proved system for coded remote control—Syncrostep.

558. Corrugated Wire Glass
Pennsylvania Wire Glass Company. Informative catalogs available as follows: (1) sidewall catalog; (2) general catalog; (3) partitions and screens catalog; (4) Penglass ventilator catalog; and (5) brochure on facilities for glass and metal working for defense production. *Please specify.*

559. Weed and Brush Control
National Aluminate Corporation. Complete data on spray car availability and Nalco chemicals for keeping right-of-way weed-free.

560. Dual Film-A-Record
Remington Rand, Inc. Booklet F-264 describes the new Dual Film-A-Record method of simplifying the microfilming operation.

561. Fasteners
The Lamson & Sessions Company. Booklet "Railroad Engineered Fasteners" gives information on the L & S line of fasteners.

562. Unicel Freight Car
Pressed Steel Car Company, Inc. Complete information available on the Unicel combinaton refrigerator-box car.

563. Braided Wire Slings
Union Wire Rope Corporation. Free sample and information on Tuffy Braided Wire Slings offered.

564. Trap Doors & Retractible Steps
O. M. Edwards Co., Inc. Specifications and complete data on Edwards streamlined trap doors and retractible steps.

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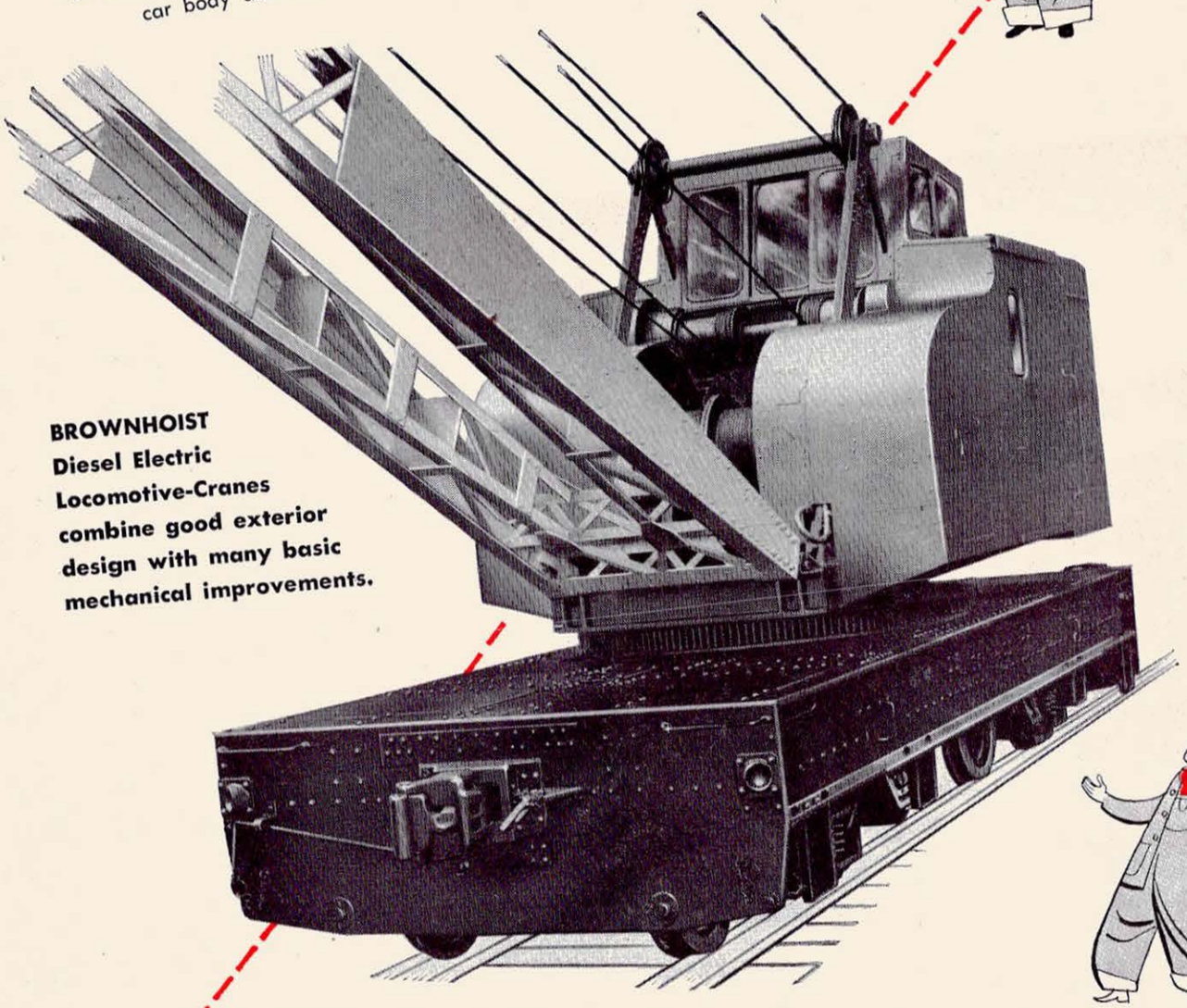
OUTSIDE: It's a beauty Extra-heavy Streamlined MONITOR-TYPE CAB! 360° visibility! All controls conveniently located; all machinery fully protected from the weather, yet accessible. New CLEAR VISION BOOM. 14 inch safety clearance between car body and upper works.



BROWNHOIST Diesel Electric Locomotive-Cranes combine good exterior design with many basic mechanical improvements.

INSIDE: It's really engineered New DYNAMATIC CLUTCH gives smooth, sensitive 32-step control, banishes slippage, eliminates torsional impulse and vibration. Safe FRICTION CLUTCH BOOM HOIST driven by worm and wheel in oil bath. Twin-barrelled, extra-large boom-hoist drums take all line in one layer. New Wide-faced Hoist Drums mounted on roller bearings with air cylinder mounted within the drum. ELECTRIC ROTATION and electric travel reduce maintenance to a minimum. Optional features include 8-WHEEL CHAIN DRIVE for increased drawbar pull and TWIN ENGINE DRIVE where greater tractive effort is required.

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INDUSTRIAL BROWNHOIST CORPORATION, BAY CITY, MICHIGAN

DISTRICT OFFICES: New York, Philadelphia, Cleveland, Chicago, San Francisco, Canadian Brownhoist, Ltd., Montreal, Quebec. AGENCIES: Detroit, Birmingham, Houston, Los Angeles

For additional information, use postcard on pages 63, 64

(*Continued from page 62*)

Belt and the Chicago River & Indiana.

William C. Chapman, chief electrical engineer on the Chicago & North Western, has retired after 40 years of service. He started with the company in 1911, as electrician at Chicago and was promoted to chief electrician at Clinton, Iowa, in 1914. In 1916 he was appointed electrical inspector at Chicago, becoming assistant electrical engineer in 1927. He was appointed electrical engineer in 1945; chief electrical engineer in 1947.

SPECIAL

Roy J. Cook, associate editor of the Atlantic Coast Line News, monthly publication of the Atlantic Coast Line, has been appointed editor, succeeding **Allen B. Love,** who has retired at his own request after 33 years of service with the A.C.L.

Dr. C. B. Wright has been appointed medical officer of the Alberta district of the Canadian Pacific, at Calgary, Alta. He succeeds **Dr. L. S. Mackid,** chief medical officer of the district, who has retired after 35 years of service.

Glen E. Morgan, manager of personnel for the Chicago & Eastern Illinois, has been named assistant director of personnel, with headquarters as before at Chicago. He is succeeded by **Frank J. Zobac,** former supervisor of personnel. **John M. Plant** will take over Mr. Zobac's duties as supervisor of personnel.

As reported in *Railway Age* October 8, **John E. Newman** has been appointed director of labor relations of the New York Central System. Mr. Newman, who was born in 1896 at Canisteo, N. Y., entered the service of the N.Y.C. in 1913 as stenographer in the superintendent's office at Corning, N. Y. He served in the United

John E. Newman

States Army during World War I. After transferring to the Central's personnel department at New York in 1923 as an examiner, he became chief examiner in 1929 and chief clerk in 1942. He was appointed assistant to vice-president of personnel in 1945, which position he held until his recent appointment.

Lloyd Wilson, editor of Cotton Belt News, monthly publication of the St. Louis Southwestern, has been named special public relations representative for the road. **Marshall W. Hamil,** former newspaperman from Illmo, Mo., succeeds Mr. Wilson as editor.

OBITUARY

Robert J. Blagburn, general freight agent of the Baltimore & Ohio in Chicago, died on October 5 in St. Luke's Hospital, Chicago. A biographical sketch of Mr. Blagburn appeared in *Railway Age* April 16.

William Dabney Duke, 78, who retired on February 1, 1935, as general manager of the Richmond, Fredericksburg & Potomac at Richmond, Va., died on October 10 in a hospital in that city.

THESE ROADS and OTHERS
ARE Saving
With "The Railroad Boiler"
A steadily increasing number of roads, both large and small, are using the completely automatic AMESTEAM GENERATOR. This modern compact steam producer requires no boiler room labor and provides very high oil burning efficiency, evaporating 15¾ pounds of water on 1 pound of fuel, using No. 6 oil, providing 85% thermal efficiency.
Single units from 10 to 500 h.p. Higher horsepower available. Suitable for multiple installations. Delivered complete ready for service connections. Phone, write or wire.
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AMESTEAM GENERATOR
"The Railroad Boiler"
PRODUCT OF AMES IRON WORKS
OSWEGO, N. Y.

STOP RUST with RUST-OLEUM

Always an operating hazard—and a constant drain on the maintenance budget—rust is a doubly dangerous enemy now when it is difficult to obtain metal replacements.

RUST-OLEUM stops rust effectively—is the practical answer to many railroad rust problems. Its tough, pliable, rust-resisting film gives excellent protection to bridges, rolling stock, metal buildings, signal equipment, tanks and many other rustable metal surfaces.

CUT YOUR MAINTENANCE COSTS

RUST-OLEUM cuts maintenance costs in two ways. (1) It prevents rust on new rustable metal surfaces so that costly replacements can be deferred longer than previously could be expected. (2) Because RUST-OLEUM can be applied *even* over metal already rusted—usually without sandblasting or the use of chemical rust removers—it saves many, many man hours. *Write for your copy of the NEW RUST-OLEUM Railroad Catalog.*

"Rigid economy, Mon!"

Available in colors, and aluminum

RUST-OLEUM CORPORATION
2548 Oakton Street, Evanston, Illinois

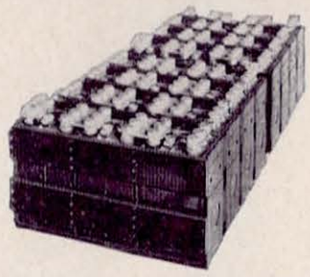
For additional information, use postcard on pages 63, 64

NICAD

MADE IN U.S.A.

T-TYPE BATTERY
for
RAILROAD
DIESEL STARTING

2 models—THR-30, THR-44



SAVES UP TO 100 MAN HOURS PER YEAR PER LOCOMOTIVE

Because the NICAD nickel cadmium storage battery requires less maintenance you save precious man hours and, at the same time, are assured of reliable, foolproof battery service throughout its long life. The T-Type NICAD battery has an exceptionally high ampere rate of discharge at useful voltage, a vital consideration in engine-starting applications.

BATTERY TYPE	AMPERE HOURS	NUMBER OF CELLS	GROUP TRAY LENGTH A	TRAY WIDTH B	WEIGHT LBS.
THR 30	142	48	32¾"	8"	1825
THR 44	210	48	44¾"	11"	2675

THR-30—Interchangeable with 17-plate, 248 A.H. Lead Acid Batteries
THR-44—Interchangeable with 25-plate, 426 A.H. Lead Acid Batteries

NICAD IS LIGHTER, NEEDS NO ADDITIONAL SPACE

Exceptionally Long Life
Low Cost Operation
Negligible Water Consumption
Low Internal Resistance
Rugged Steel Construction
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Uses Standard Charging Equipment

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MADE EXCLUSIVELY IN THE U.S.A.

Current Publications

FILM CATALOG

Railroad Film Directory. 56 pages, illustrations. Association of American Railroads, Transportation bldg., Washington 6, D. C. Free.

Now in its fourth edition, this guide to more than 200 films and film-strips owned by or relating to American railroads includes films which feature the history, physical properties, operations and accomplishments of the railroads and the role they play as transportation agen It also includes many films which feature agricultural and industrial developments, as well as recreational and scenic attractions in the United States, Canada and Mexico. The guide has three major divisions: descriptions of films and filmstrips; address list of railroads, commercial distributors and industrial firms; and railroad and subject index.

BOOKS

The Official Directory of Commercial Traffic Executives, 1951 Edition. 169 pages. Traffic Publishing Company, 100 Sixth ave., New York 13, $3.

The first section of this directory lists alphabetically 6,741 companies, together with names and addresses of their traffic executives. The second section is an alphabetical list of traffic executives with cross references to their respective company listings. The third section is a handy reference list of transportation commissions and traffic organizations.

The Complete Book of Model Railroading, by Louis H. Hertz. 335 pages, illustrations, drawings. Simmons-Boardman Publishing Corporation, 30 Church st., New York 7. $4.95.

This book covers completely all aspects of model railroading—tinplate and scale, layout planning and construction, building equipment, control and wiring, signals, scenery, operation, the history of the hobby, trolley and live steam models, and much more. It is an entirely practical work designed to serve as a complete guide to creation of a model railroad system of any size or type desired—from the very simplest and least expensive equipment, to the most elaborate set-up imaginable. It should prove useful to the beginner and the experienced model railroad fan alike.

TRADE PUBLICATIONS

Byers Wrought Iron Pipe for Snow-Melting Systems. 36 pages, illustrations. A. M. Byers Company, Pittsburgh.

A booklet presenting a study of 50 snow-melting systems now in operation that are made of wrought iron pipe. The illustrations (83 of them) include pictures of the systems either in operation or under construction, and piping layouts for such installations as loading areas, ramps, walks and driveways. In the text are chapters devoted to design, piping properties, use of anti-freeze solutions, fabrication and installation, installation and operating costs, operating practices, controls and auxiliary units.

Kinnear Rolling Doors, 32 pages, illustrations. Kinnear Wood Rolling Doors. 4 pages, illustrations. Kinnear Manufacturing Company, Columbus 16, Ohio.

The first of these publications gives construction features, applications, and data in regard to installation and operation of the complete line of Kinnear interlocking steel-slat rolling doors for both service and fire protection purposes. The second publication gives the same information in regard to Kinnear wood rolling doors which operate on the same basic principle as the steel doors and will be available as a substitute for the steel doors if steel becomes unavailable because of armament demands.

PAMPHLETS

Railroad Trends and Prospects, by Julius H. Parmelee. 29 pages, charts, tables. Association of American Railroads, Transportation bldg., Washington 6, D. C. Free.

In this address presented before the New York Society of Security Analysts in New York on June 8, Dr. Parmelee reviews general trends in railroad operations, including traffic and earnings, prices and wages, and reductions in debt and annual charges. He then proceeds to discuss short-term prospects; traffic estimates for 1951; the current situation, and the longer-term outlook. Statistics in the pamphlet have been revised to July 23. The section on reductions in railroad debt and fixed charges was published in *Railway Age*, August 20, page 45.

When Apprentice Joe Becomes G. I. Joe. 6-page folder. Bureau of Apprenticeship, U. S. Department of Labor, Washington 25, D. C. Free.

The procedure to be followed by an apprentice and his employer when the apprentice leaves to join the armed forces is clarified in this brief, illustrated folder. It explains the records to be prepared for use by an apprentice when reporting for active duty, and also for his use on return from military service, so he may be assured of reemployment rights.

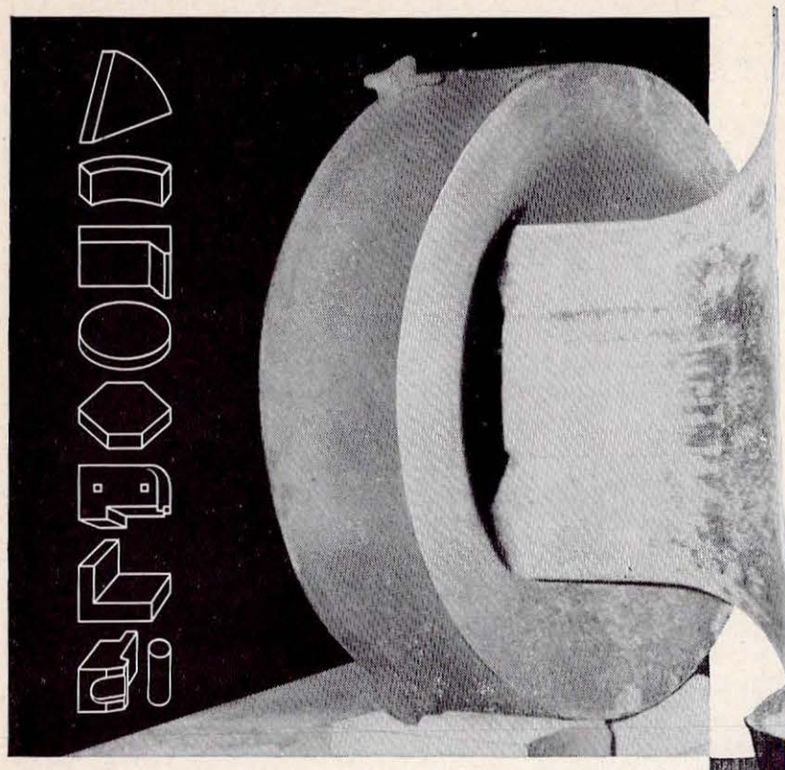
Your British Railways. 48 pages, illustrations. The Railway Executive (British Railways), 222 Marylebone Road, London, N. W. 1, England. At British railway station bookstalls, 2 shillings.

A picture story of railway operations.

Tabulation of Statistics Pertaining to Signals, Interlocking, Automatic Train Control, Telegraph and Telephone for Transmission of Train Orders, Spring Switches, and Train Communication Systems as Used on the Railroads of the United States, January 1, 1951. 50 pages. Bureau of Safety, Interstate Commerce Commission, Washington 25, D. C.

Contains statistics for individual railroads on the above-mentioned subjects.

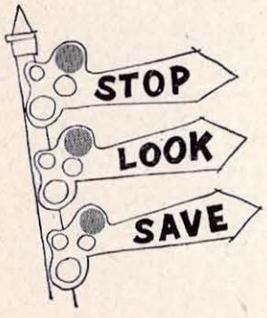
NOW... Get refractory shapes like this faster, at lower cost...



Photograph at left shows a boiler ring cast with 3X Firecrete. It is just one of many shapes that can be cast and fired in less than 24 hours with this hydraulic setting Johns-Manville refractory material.

Just mix, then cast. 3X Firecrete mixes and pours like concrete . . . is easy to handle.

. . . cast them yourself with 3X FIRECRETE



WITHIN 24 hours you can have ready for use any refractory shape you need—and save money as well—by casting it yourself with monolithic, hydraulic setting Johns-Manville 3X Firecrete*.

You'll find that Firecrete mixes and pours as easily as concrete . . . and hardens quickly with negligible drying and firing shrinkage. It has high resistance to spalling, too. And it is designed to withstand soaking temperatures of 3000F . . . to meet the high operating temperatures encountered in railroad service today.

Furnished in 100-pound bags for convenient handling and storage, 3X Firecrete is *available for immediate delivery.* Why not write us today for further information on how it can solve *your* refractory problem? Address Johns-Manville, Box 290, New York 16, N. Y.

*REG. U. S. PAT. OFF.

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93 YEARS OF SERVICE TO TRANSPORTATION

CLASSIFIED DEPARTMENT

RAILROAD EQUIPMENT—*FOR SALE*

STANDARD GAUGE FREIGHT CARS

Box, Single Sheathed, 50-Ton
Cabooses, 8-Wheel, Cupola Type
Flats, 50-Ton, Steel Underframe, 40' 0"
Gondolas, Composite or All-Steel, 50 & 70-Ton
Gondolas, All-Steel, 55-Ton, Solid Bottom
Hoppers, Covered, All-Steel, 50 & 70-Ton
Hoppers, Twin, All-Steel, 50-Ton, Cross Dump
Hoppers, All-Steel, 70-Ton, Cross Dump
Tank, 8,000-Gallon, Class 11

EXTRA LONG FLAT CARS

40- & 50-Ton Capacity, Length 70' and 74'

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If there's dust on it

it may be

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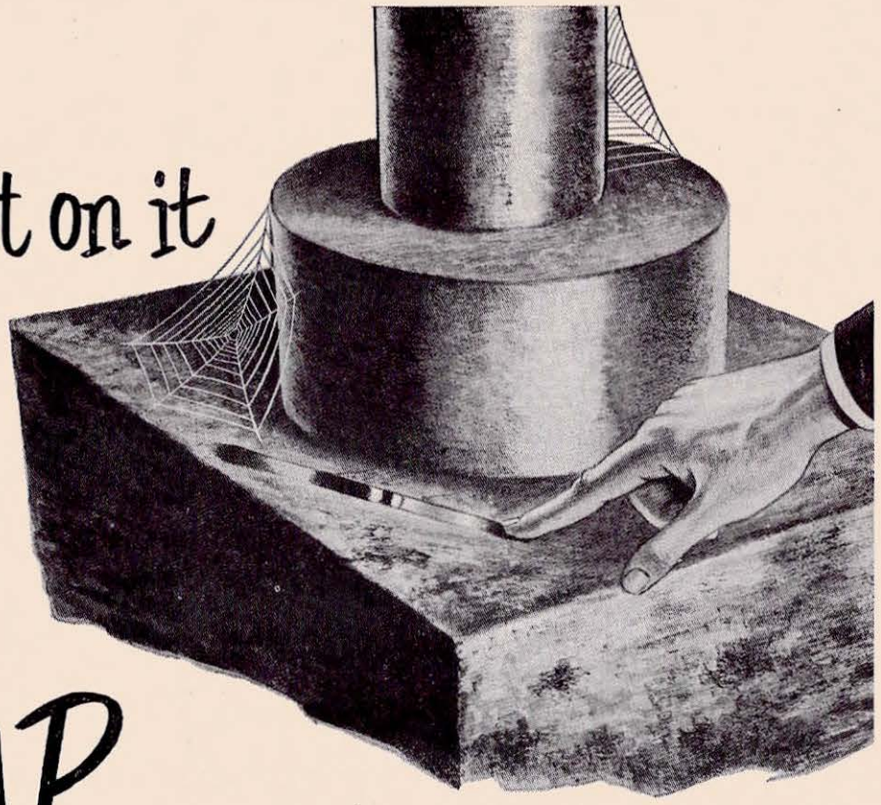


If it's SCRAP

it's needed to make STEEL!

One half of all the raw materials used in steel production is *scrap*.

Today, the mills aren't getting enough iron and steel scrap to keep up with greatly increased steel production.

AND WHAT IS SCRAP?

Scrap is many things. Here are three:

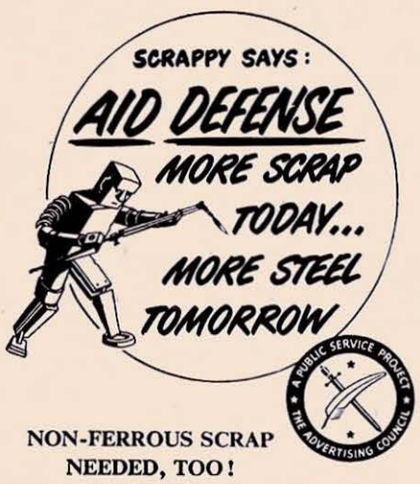
1. the "left-overs" of iron and steel production, fabrication and machining.
2. junked autos and old farm machinery.
3. obsolete iron and steel equipment in factories, such as old machinery, tools, dies, jigs, fixtures, chain, valves, etc.

But—the "left-overs" are not great enough today to fill the unprecedented demands for steel production.

And, with replacements scarce, less junked autos and farm machinery have entered the scrap supply lines.

So—only by digging out all the never-to-be-used odds and ends of broken, worn-out, and obsolete factory equipment . . . can mills and foundries get all the scrap they need.

If they don't get it, steel production rates may be severely hampered . . . and our country's effort to maintain military strength and civilian economy *at the same time*, will be crippled.



NON-FERROUS SCRAP NEEDED, TOO!

It's YOUR Job to Furnish More Scrap

Institute a steel scrap salvage program in your plant. Appoint one top official in your company to take full responsibility. Have him consult with your local Scrap Mobilization Committee and local scrap dealers. The nearest office of the National Production Authority, Department of Commerce, can tell you who your local Scrap Mobilization chairman is.

Do this now. Write for a copy of the booklet, "Top Management: Your Program for Emergency Scrap Recovery", to Advertising Council, 25 W. 45 St., New York 19, N. Y.

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Impressed by these economies, three leading railroads have already made the switch from oil to grease in their Timken bearing equipped passenger cars. More than a dozen other roads are testing wheel-turning to wheel-turning lubrication with grease-lubricated Timken bearings—with favorable results.

ONLY TIMKEN BEARINGS DO IT

Railroad operating tests show that Timken bearings are the *only* railroad journal bearings using an AAR-approved grease which can consistently go a full wheel-turning period without adding lubricant. And Timken bearings can be converted from oil lubrication to grease without modifying the bearings or buying extra journal parts.

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